

# ***Headquarters U.S. Air Force***

---

***Integrity - Service - Excellence***

## **S&E Career Field Update**

**Mr. Jim Engle**

**Air Force S&E**

**Functional**

**Manager**

**SAF/AOR**



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA



U.S. AIR FORCE

# ***Who I am and What I Do for You***

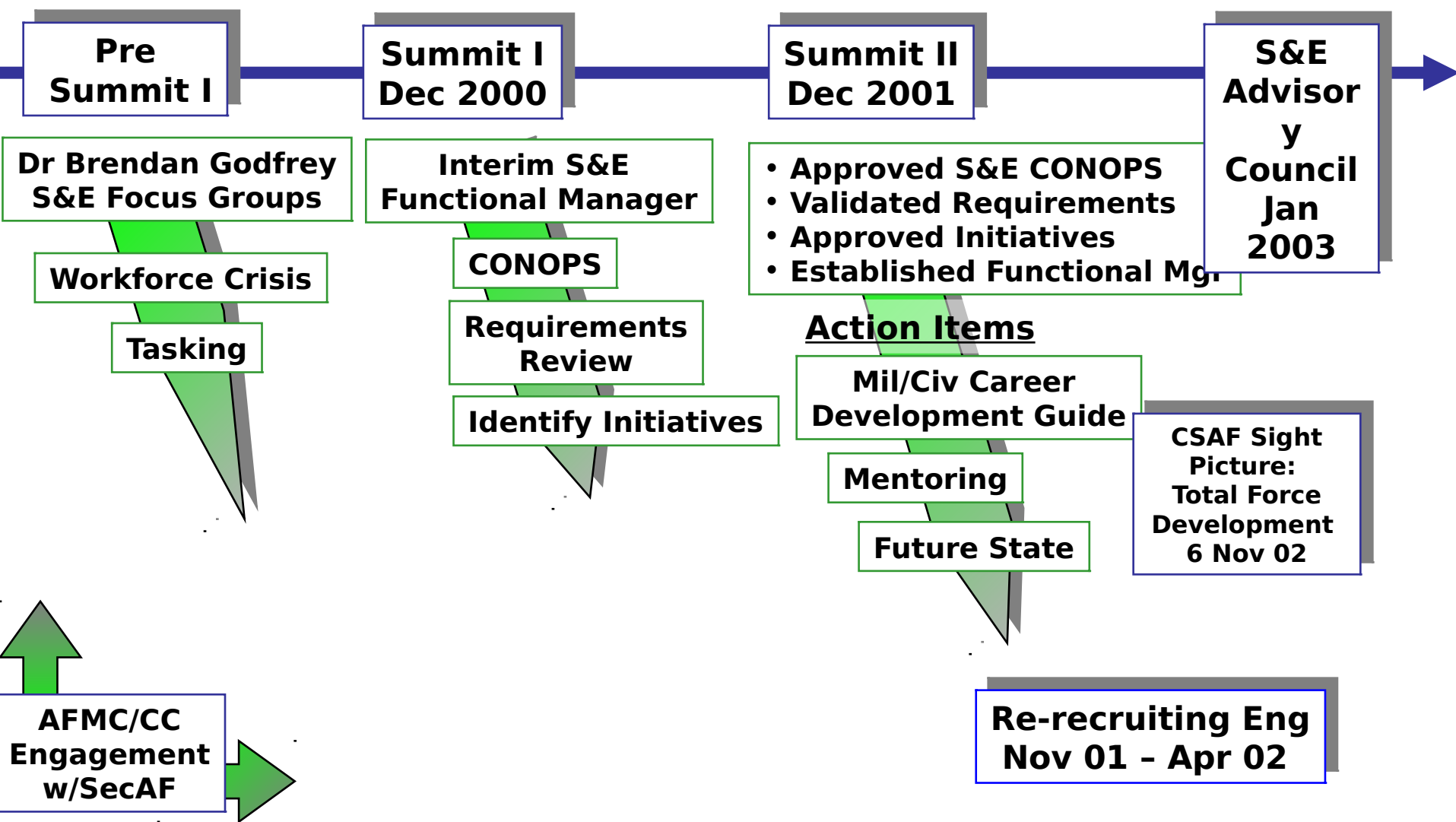
---

- **Deputy Assistant Secretary (DAS) for Science, Technology and Engineering (ST&E), for the AF**
- **Additional major role of S&E Functional Manager**
  - **AFSC 61XX, 62XX and civilian equivalent**
- **What that means—I develop and implement AF wide policy and guidance that impacts the S&E career field**
  - **Responsible for:**
    - **Recruiting, Retention, Career Development**
- **Bottom line: What I do impacts you and your career**



U.S. AIR FORCE

# Workforce Shaping Timeline

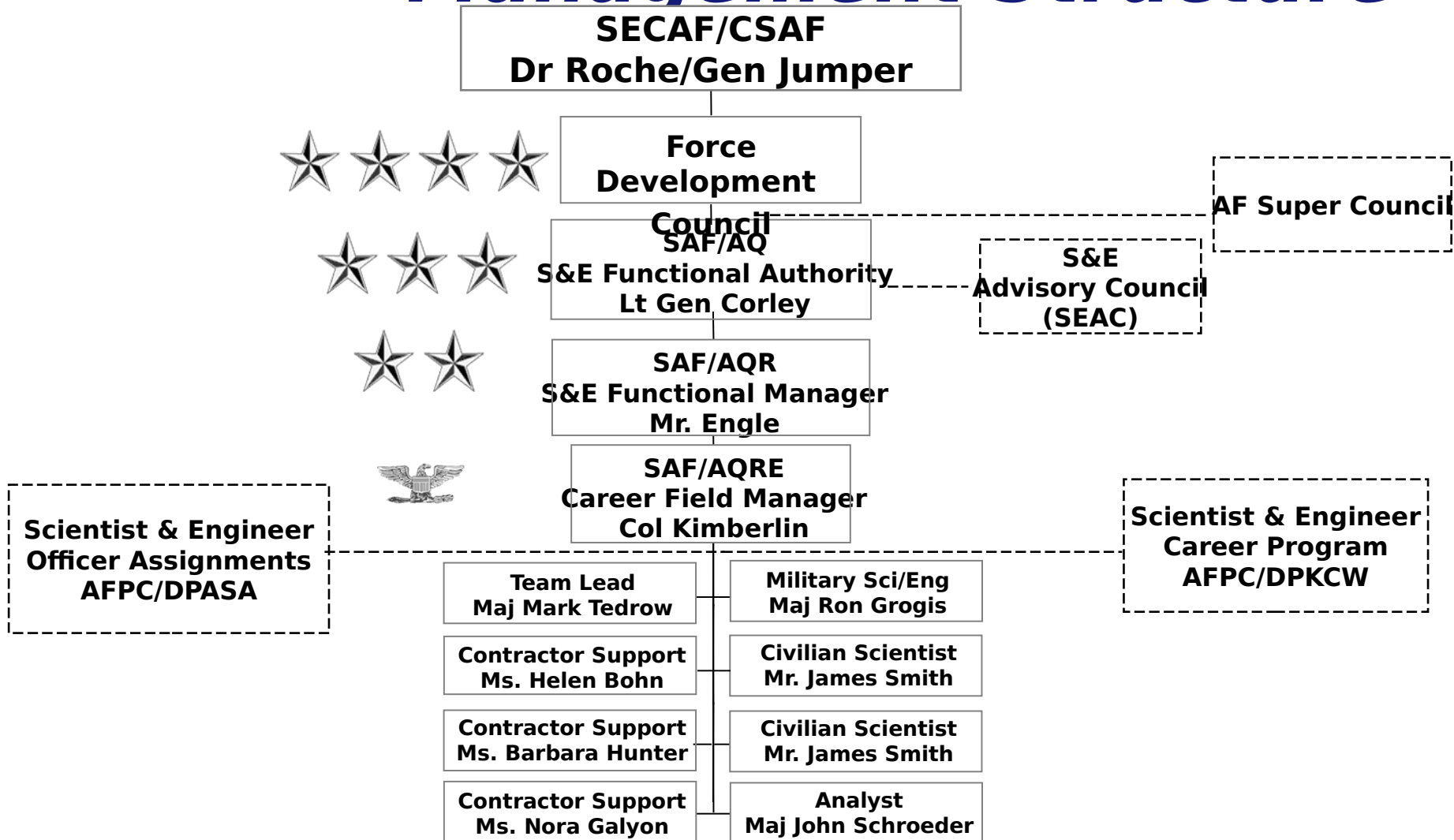


*Integrity - Service - Excellence*



U.S. AIR FORCE

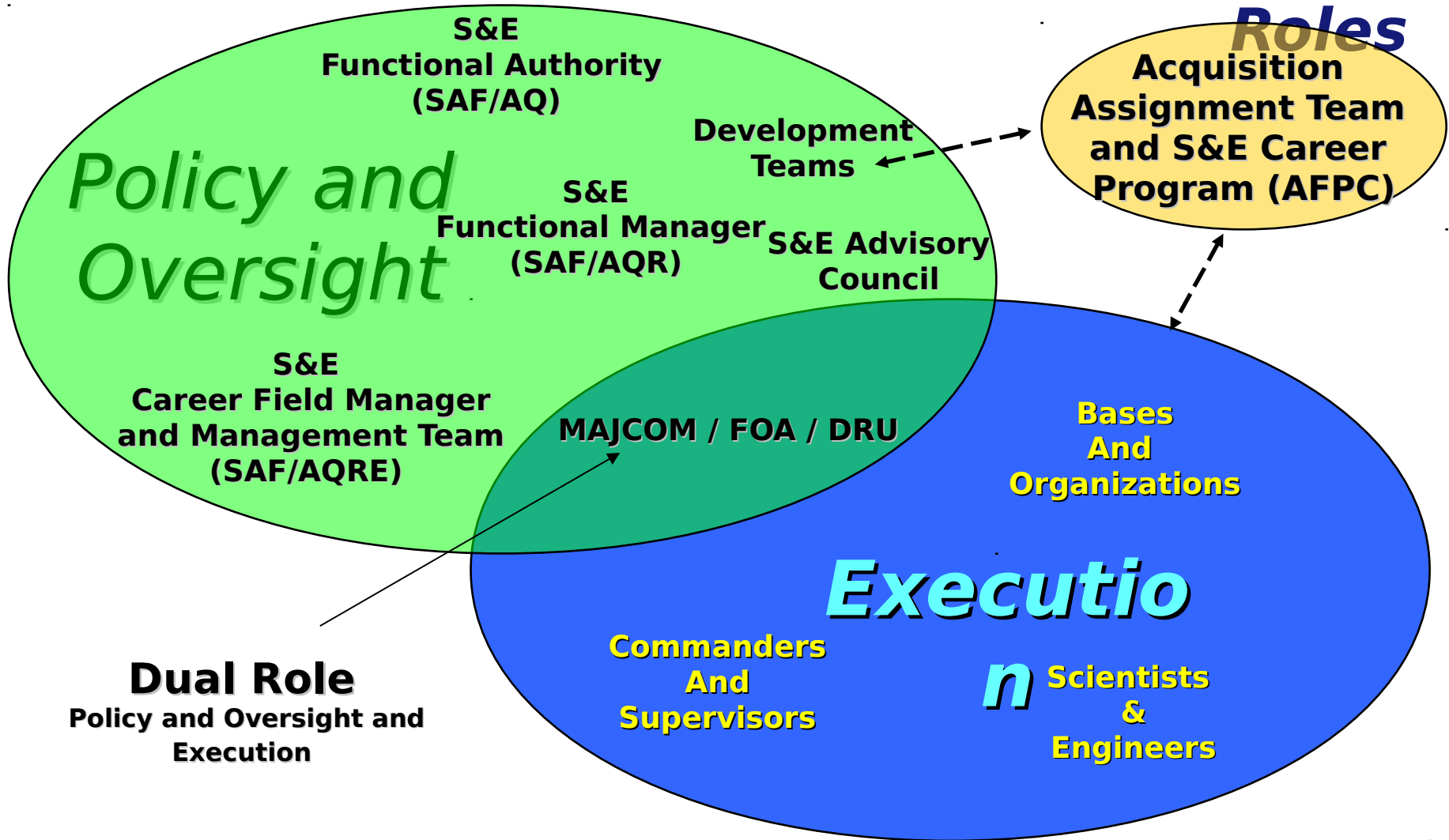
# S&E Career Field Management Structure





U.S. AIR FORCE

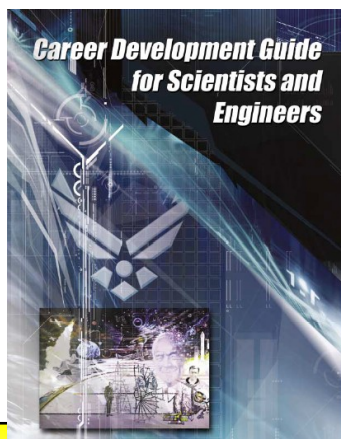
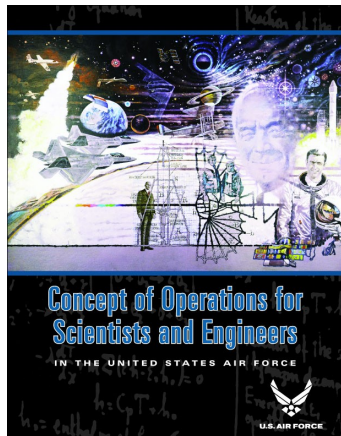
# Introduction: Career Development Players and Roles





**U.S. AIR FORCE**

# ***Introduction: S&E Resources***



- **S&E CONOPS**
  - **Ties S&Es work with higher-level AF documents**
- **S&E Career Development Guide**
  - **Tool for developing careers**
- **S&E Mentoring**
  - **Mentoring from an S&E perspective**
- **S&E Career Opportunities Guide**
  - **Highlights where S&E jobs are**

**All Information available on the S&E  
Homepage  
(<http://www.safaq.hq.af.mil/aqre/se>)**

*Integrity - Service - Excellence*



**U.S. AIR FORCE**

---

# ***Discussion Topics***

- **Introduction**
- **Career Development Guide (CDG)**
- **Career Opportunities Guide (COG)**
- **Mentoring**
- **S&E Mil/Civ Recruiting/Retention Initiatives**
- **2003 Military Retention Survey and Pay Comparison**
- **S&E Awards**
- **Career Field Statistics**
- **Scientist and Engineer Advisory Council (SEAC)**
- **Military Force Development**
  - **Development Teams**
  - **Officer Development Plan**
  - **Developmental Education (DE)**
  - **Advanced Academic Degrees**
- **Civilian Force Development**
- **National Security Personnel System (NSPS)**
- **Contact Information**

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Career Development Guide (CDG)***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA







**U.S. AIR FORCE**

# ***Career Development Guide (CDG)***

- **General information applicable to all AF S&Es**
  - **Not intended to provide detailed career options or paths**
  - **Basically a roadmap to aid S&Es, their commanders, supervisors, and mentors in developing careers for the S&E**
- **Most important aspect--allows all parties to understand the consequences of decisions that are made regarding an individual's careers**
  - **Allows for a mutual understanding of career expectations based on career decisions**
- **Does not guarantee a successful career**
  - **There is no magic formula or golden path that will get you to the highest grades—many factors impact this**
- **CDG was “deployed” to all AF S&Es**
  - **If you did not receive a copy E-mail the S&E Team at [SAF.S&E@pentagon.af.mil](mailto:SAF.S&E@pentagon.af.mil)**



***Career Development Guide  
for Scientists and  
Engineers***

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Career Opportunities Guide (COG)***



**U.S. AIR FORCE**



**U.S. AIR FORCE**

# ***S&E Career Opportunities Guide (COG)***

- **Web based, designed to assist S&Es in planning their careers**
- **Highlights S&E job opportunities within the AF, Joint and other agencies to suit all career objectives**
  - **To be used in concert with the CDG**
- **Provides information on the organization, approximate number of military and civilian S&E billets at each organization, and a brief description of what the S&Es do there**
  - **Interactive--provides links to the agencies, bases, states, CONUS and Overseas, etc.**
- **Overview of possible job locations to use in career planning**
  - **Availability of jobs (number of positions and locations) may change due to AF needs, and therefore, additional dialogue with AFPC is needed to ensure those jobs are actually available**

[http://www.safaq.hq.af.mil/aqre/mentoring/career\\_guide/introduction.html](http://www.safaq.hq.af.mil/aqre/mentoring/career_guide/introduction.html)

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Mentoring Web-Site***



**U.S. AIR FORCE**

## United States Air Force Scientist and Engineer Homepage

### Career Development Guide and Mentoring

- [S&E Home](#)
- [Career Development](#)
- [Mentoring Survey](#)
- [S&E Mentoring Home](#)

#### S&E Mentoring Home Page

##### Purpose:

The purpose of this site is to provide Commanders, Supervisors, and Mentors with tools they can use to help S&E civilian and military protégés reach their full potential.

The site also provides tools and references for S&Es who are protégés or who desire a mentor.

S&E mentoring is not meant to replace the existing AF Mentoring program, but to supplement it by providing resources that specifically relate to S&Es.

[Commander's  
Corner](#)

[Mentor  
Resources](#)

[Protégé  
Resources](#)

[Career  
Development  
Guide](#)

[General S&E  
Information](#)





# ***S&E Mentoring Web-Site***

**U.S. AIR FORCE**

---

- [http://www.safaq.hq.af.mil/aqre/mentoring/mentoring\\_guide.html](http://www.safaq.hq.af.mil/aqre/mentoring/mentoring_guide.html)
- Reinforces the AF Mentoring Program, from an S&E perspective
  - Supplements, but does not replace existing AF Mentoring Program, Policy and Directives as established per AFPD 36-34, Air Force Mentoring Program and AFI 36-3401, Air Force Mentoring
- Contains reference information and resources for commanders, mentors, and protégés with a focus on S&Es
  - Information and resources are generic in nature, can be used for mentoring all employees
  - Does not provide step-by-step AF S&E mentoring processes and procedures
    - Organizations are responsible for establishing and managing their own mentoring program
- Does not contain database of mentors and protégés
- The site is divided into four sections:
  - Commander's Resources; Mentor Resources; Protégé Resources; General S&E Information

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Mil/Civ Recruiting/Retention Initiatives***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA







U.S. AIR FORCE

# ***Other S&E Efforts***

## **Military Initiatives**

- **Critical Skills Retention Bonus (CSRB)**
- **1-Year AFROTC**
- **Technical Degree Sponsorship Program (TDSP)**
- **Airman Education & Commissioning Program (AECF)**

## **Civilian Initiatives**

- **Group Retention Allowance**
- **Civilian Career Program Relocation Bonus**
- **Civilian Recruitment Bonus for College Recruits**
- **Civilian Student Loan Repayment Program**
- **Civilian S&E Recruitment Bonus**
- **Civilian S&E retention Allowance**
- **Co-Op Central Funding**

AF/DP has Program Element ownership for all initiatives







U.S. AIR FORCE

# ***Critical Skills Retention Bonus (CSRB)***

---

- **Description:** Authority to pay retention bonus, max of \$200K in a career, to officers holding critical skills.
- **Purpose:** Monetary incentive to increase retention of officers with critical skills
- **Recipients:** Offered in FY03 as a \$10K per year for max of 4 years to 5 critical AFSCs in 4-13 CYOS (61, 62, 63, 32 and 33 AFSCs)
- **Methodology:** Cash payment made upon signing contract and anniversary payments made annually
- **FY04 Budget:** \$18.5 M\* for S&E and PM continuing contracts
  - Congress only provided enough funding for 61, 62 and 63 AFSCs. \$27.4 M cost for 32 and 33 AFSCs taken out of hide.
  - No funding available for new contracts in FY04
  - Existing Contracts will be renewed!!!

\*AF/DP has Program Element ownership for this initiative



# FY03 CSRB Takers by AFSC - 6XXX

U.S. AIR FORCE

TAFCSO		Years Eligible	61S			62E			63A			Totals		
Start	End		Elig.	Appr.	%	Elig.	Appr.	%	Elig.	Appr.	%	Elig.	Appr.	%
Feb-88	Feb-89	1	26	20	77%	112	89	79%	88	74	84%	226	183	81%
Feb-89	Feb-90	2	30	27	90%	150	113	75%	72	69	96%	252	209	83%
Feb-90	Feb-91	3	31	28	90%	52	40	77%	22	22	100%	105	90	86%
Feb-91	Dec-91	4	34	29	85%	62	57	92%	19	15	79%	115	101	88%
Jan-92	Dec-92	4	40	35	88%	108	102	94%	59	53	90%	207	190	92%
Jan-93	Dec-93	4	40	36	90%	152	141	93%	71	65	92%	263	242	92%
Jan-94	Dec-94	4	51	45	88%	143	127	89%	65	59	91%	259	231	89%
Jan-95	Dec-95	4	52	46	88%	156	130	83%	95	81	85%	303	257	85%
Jan-96	Dec-96	4	50	36	72%	137	117	85%	101	81	80%	288	234	81%
Jan-97	Dec-97	4	46	33	72%	146	121	83%	110	79	72%	302	233	77%
Jan-98	Dec-98	4	57	44	77%	160	123	77%	114	70	61%	331	237	72%
Jan-99	Sep-99	4	75	34	45%	113	108	96%	95	76	80%	283	218	77%
<b>Totals</b>			<b>532</b>	<b>413</b>	<b>78%</b>	<b>1491</b>	<b>1268</b>	<b>85%</b>	<b>911</b>	<b>744</b>	<b>82%</b>	<b>2934</b>	<b>2425</b>	<b>83%</b>

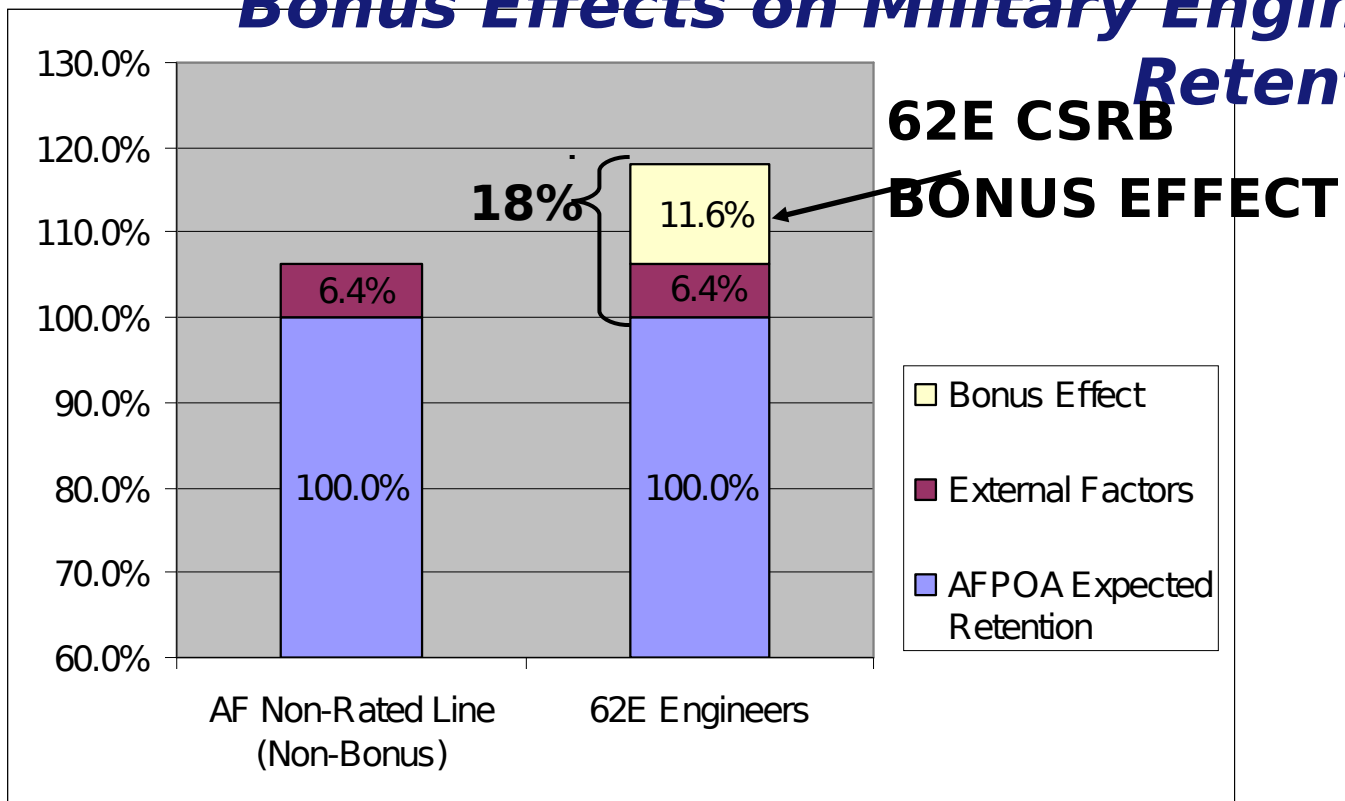
■ As of 30 Sep 03



U.S. AIR FORCE

# 2003 CSRB Return on Investment

## Bonus Effects on Military Engineer Retention



- AF retention increased 6.4% due to external factors (e.g. economy)
- 18% retention increase for 62E due to both external (6.4%) and bonus effects (11.6%)
  - 140 additional officers retained due to bonus



# ***One-Year AFROTC Program***

**U.S. AIR FORCE**

---

- **Description:** Developed to fix overall ROTC shortfall by allowing college Juniors to sign up for AFROTC in senior year
  - Previously only a 2- or 4-year program
  - Open to all degrees, with emphasis on Critical AFSCs
  - Program originally planned only for FY02/03
- **Purpose:** Capture college students with critical skill degrees
- **Recipients:** College students with technical degrees
  - FY04 Program includes 3 Electrical Engineers, 1 Civil Engineer, 2 Environmental Engineers
  - FY03 produced 30 Tier 1-3 tech majors
- **FY04 Budget:** N/A\* - uses dollars already available for scholarships from unfilled positions and/or from cadets who have left AFROTC

*\*AF/DP has Program Element ownership for this initiative*



U.S. AIR FORCE

# ***Technical Degree Scholarship Program***

***(TDSP)***

- **Description:** Previously known as College Senior Engineer Program or College Senior Sponsorship Program (CSSP)
  - Enlist as E-3, continue to attend college, enter OTS after graduation
- **Purpose:** Recruit juniors and seniors pursuing engineering degrees
- **Recipients:** College juniors and seniors
- **Methodology:** Students are enlisted as E-3s (but no basic training, etc.) and continue their studies. Sent to OTS for commissioning immediately after graduation
- **FY04 Budget:** ~1.7 M\*; however cost is “invisible” because it comes out of enlisted pay account

\*AF/DP has Program Element ownership for this initiative



U.S. AIR FORCE

# ***Airman Education and Training Program (AECPT)***

- **Description:** Provides tuition plus salaries (E-5 and above), focused on S&E growth
  - **Goal:** 30-35 graduates per year
- **Purpose:** Target enlisted force as officer candidates\_
- **Recipients:** Enlisted personnel with some college who exhibit an aptitude for technical degrees
  - Graduates in FY04 include 15 EEs, 3 Mech, 1 physicist
  - FY05 will have 19 EEs, 5 Mech, 1 chemist
  - FY06 project 7 EEs, 1 Aero, 2 mech, 1 nuclear, 3 physicists
  - Each year also has comp sci, CE and other tech degrees
- **Methodology:** Yearly central selection board. Selectees are immediately promoted to E-5 (if currently junior to that rank), sent to civilian institutions for degree completion. After graduation, sent immediately to OTS for commission.
- **FY04:** \$4.8 M\*

\*AF/DP has Program Element ownership for this initiative



U.S. AIR FORCE

# ***Group Retention Allowances (GRA)***

---

- **Purpose: Improve pay comparability with private industry for difficult-to-fill occupations**
- **Background\***
  - **Group Retention Allowances replaced Special Salary Rates**
  - **Targets GS-05 through GS-12**
    - **Up to 10% of basic pay**
    - **Requires annual recertification**
  - **Corporate Structure agreed to partially fund FY06/07**
  - **Air Staff pursuing FY04/05 funding and shortfall for 06/07**
- **Current Status**
  - **SecAF approved use of Retention Allowances for FY03 and beyond**

CAFDP has Program Element ownership for this initiative



U.S. AIR FORCE

# ***Civilian Career Program Relocation Bonus***

---

- **Description:** One-time payment of up to 25% of basic annual salary upon completion of PCS; payments generally range between \$5K - \$10K; minimum 1-yr Service Agreement
- **Purpose:** Monetary incentive to increase interest of high quality employees requiring PCS to historically hard-to-fill positions
- **Recipients:** AF applicants selected for announcements of hard-to-fill positions requiring PCS
- **Methodology:** Cash payment made upon completion of PCS and establishment of residence at new location
- **FY04 Budget:** \$0.9 M\*

\*AF/DP has Program Element ownership for this initiative





U.S. AIR FORCE

# ***Civilian Recruitment Bonus for College Recruits***

---

- **Description:** Recruitment Bonus paid to S&E, IT and other PAQs in hard-to-fill occupations/locations; up to 25% of basic annual salary; 1-yr service agreement (SA) for S&Es and ITs, 2-yr SAs for all others
- **Purpose:** Attract high quality college graduates via salaries competitive with industry and meet critical recruitment needs caused by decade of downsizing and projected future losses of critical skills due to retirements
- **Recipients:** Targets high caliber S&E and IT PAQ college recruits
- **Methodology:** Reviewed semiannually based on starting salary comparison with private industry
- **FY04 Budget:** \$1.56 M\*

\*AF/DP has Program Element ownership for this initiative



U.S. AIR FORCE

# ***Civilian Student Loan Repayment Program***

---

- **Description**: Repayment of student loans up to \$40K at max of \$6K/yr; employee pays taxes; minimum 3-yr service agreement
- **Purpose**: Recruiting Incentive - agreement serves as retention tool
- **Recipients**: All PAQs and Copper Cap Interns
  - Allocation for S&E PAQs comes from overall Career Programs account (available to PAQ and Copper Cap only)
- **Methodology**: Bi-weekly payments directly to lending institution
- **FY04 Budget**: \$6.09 M\*

\*AF/DP has Program Element ownership for this initiative



U.S. AIR FORCE

# *Civilian S&E Recruitment*

## *~~Bonus~~*

- **Description:** SecAF approved recruitment initiative for civilian S&Es in critical skills areas; up to 25% of basic annual salary; 12-mo SA
- **Purpose:** Attract S&Es into critically undermanned occupational series via job offers competitive with industry
- **Recipients:** New hires in critical S&E occupational series
  - Electrical and computer engineers most in demand
  - 16 S&E occupational series covered
  - HQ AF/DPL memo dated 24 Nov 03 provides guidance on execution and reporting
- **Methodology:** One time lump sum payment; installation CC approves. POM'd activity starting in FY04; SAF/AQR conducts annual requirements review IAW Development Teams per CSAF Total Force Development
- **FY04:** \$8.3 M\*

\*AF/DP has Program Element ownership for this initiative



U.S. AIR FORCE

# ***Civilian S&E Retention Allowance***

---

- **Description:** SecAF-accelerated tool to target civilian workforce through retention allowances
- **Purpose:** To retain civilian S&Es with critical skills considering acceptance of outside job offers with industry/academia/other government agencies (up to 25% of base salary)
- **Recipients:** Experienced civilian S&Es that we want to retain who are considering departure from the Air Force
  - 16 S&E occupational series covered
  - HQ AF/DPL memo dated 24 Nov 03 provides guidance on execution and reporting
- **Methodology:** One time payment. Started w/ FY03 AFMC \$\$  
POM'd activity starting in FY04; coordinated with S&E Functional Management annual requirements review in accordance with Development Teams per CSAF's Total Force Development vision. Ultimately governed by local supervisors.
- **FY04:** \$1.7 M\*

\*AF/DP has Program Element ownership for this initiative



# ***Co-Op Central Funding***

**U.S. AIR FORCE**

---

- **Purpose: Target high potential college students for future Air Force employment**
- **Background**
  - **College students hired while going to school**
  - **Co-op Program funded in FY03 POM**
  - **S&E share is approximately 120 per year across FYDP**
  - **Cost includes salary plus student loan repayment**
- **Current Status**
  - **Program funded as part of workforce shaping initiative for FY03 - FY08\***
  - **On schedule; final guidance has gone out to the field**

**\*AF/DP has Program Element ownership for this initiative**



# ***Civilian S&E Recruitment and Retention Initiatives Covered***

**U.S. AIR FORCE**

## ***Occupational Series***

- **0180 Psychology**
- **0801 General Engineering**
- **0806 Materials Engineering**
- **0830 Mechanical Engineering**
- **0840 Nuclear Engineering**
- **0850 Electrical Engineering**
- **0855 Electronics Engineering**
- **0858 Biomedical Engineering**

- **0861 Aerospace Engineering**
- **0893 Chemical Engineering**
- **0896 Industrial Engineering**
- **1310 Physics**
- **1320 Chemistry**
- **1515 Operations Research**
- **1520 Mathematics**
- **1550 Computer Science**



U.S. AIR FORCE

---

***Back-Up***

# ■ **Back-Up**



**U.S. AIR FORCE**

# ***Military Initiatives Funding***

<b>Initiatives</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>
<b>Critical Skills Retention Bonus (CSRB)</b>	<b>\$14.0</b>	<b>\$13.6</b>	<b>\$15.1</b>	<b>\$14.1</b>	<b>\$14.1</b>
<b>Technical Degree Sponsorship Program (was CSP)</b>	<b>\$1.6</b>	<b>\$3.4</b>	<b>\$3.5</b>	<b>\$3.6</b>	<b>\$3.7</b>
<b>Airman Education &amp; Commissioning Program (AECF)</b>	<b>\$3.9</b>	<b>\$4.8</b>	<b>\$5.5</b>	<b>\$5.7</b>	<b>\$5.9</b>
<b>Total</b>	<b>\$19.5</b>	<b>\$21.8</b>	<b>\$24.1</b>	<b>\$23.4</b>	<b>\$23.7</b>





**U.S. AIR FORCE**

# ***Civilian Initiatives Funding***

<b>Initiatives</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>
<b>Group Retention Allowance</b>	<b>\$2.6</b>	<b>\$13.1</b>	<b>\$13.7</b>	<b>\$14.4</b>	<b>\$15.0</b>
<b>Civilian Career Program Relocation Bonus</b>	<b>\$.880</b>	<b>\$.880</b>	<b>\$.900</b>	<b>\$.900</b>	<b>\$.900</b>
<b>Civilian Recruitment Bonus for College Recruits</b>	<b>\$1.23</b>	<b>\$1.56</b>	<b>\$1.92</b>	<b>\$2.29</b>	<b>\$2.69</b>
<b>Civilian Student Loan Repayment Program</b>	<b>\$3.01</b>	<b>\$6.09</b>	<b>\$12.30</b>	<b>\$17.12</b>	<b>\$21.06</b>
<b>Civilian S&amp;E Recruitment Bonus*</b>	<b>\$4.4</b>	<b>\$8.3</b>	<b>\$8.5</b>	<b>\$8.9</b>	<b>\$9.4</b>
<b>Civilian S&amp;E Retention Allowance*</b>	<b>\$1.7</b>	<b>\$1.7</b>	<b>\$1.8</b>	<b>\$1.9</b>	<b>\$1.9</b>
<b>Co-op Central Funding</b>	<b>\$0.9</b>	<b>\$1.8</b>	<b>\$2.7</b>	<b>\$3.4</b>	<b>\$4.3</b>
<b>Total</b>	<b>\$12.9</b>	<b>\$29.3</b>	<b>\$32.6</b>	<b>\$35.8</b>	<b>\$39.2</b>

**\* Proposals in work to reallocate budget for new civ initiatives (Knowledge transfer, Increased PAC, Training)**

***Integrity - Service - Excellence***

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***2003 S&E Retention Survey and Pay Comparison***

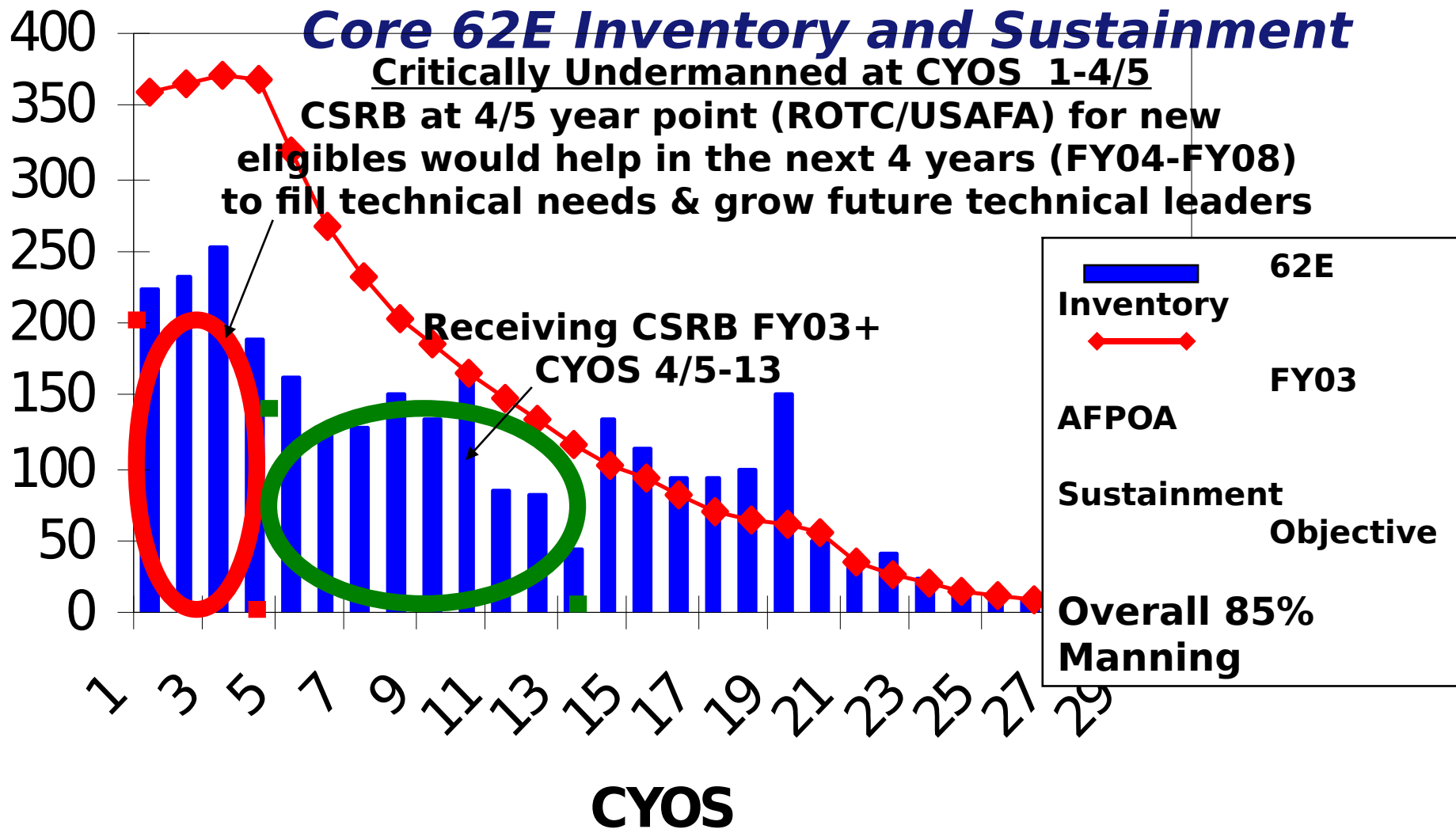


**U.S. AIR FORCE**



# FY03 62E Number/Grade Distribution

U.S. AIR FORCE





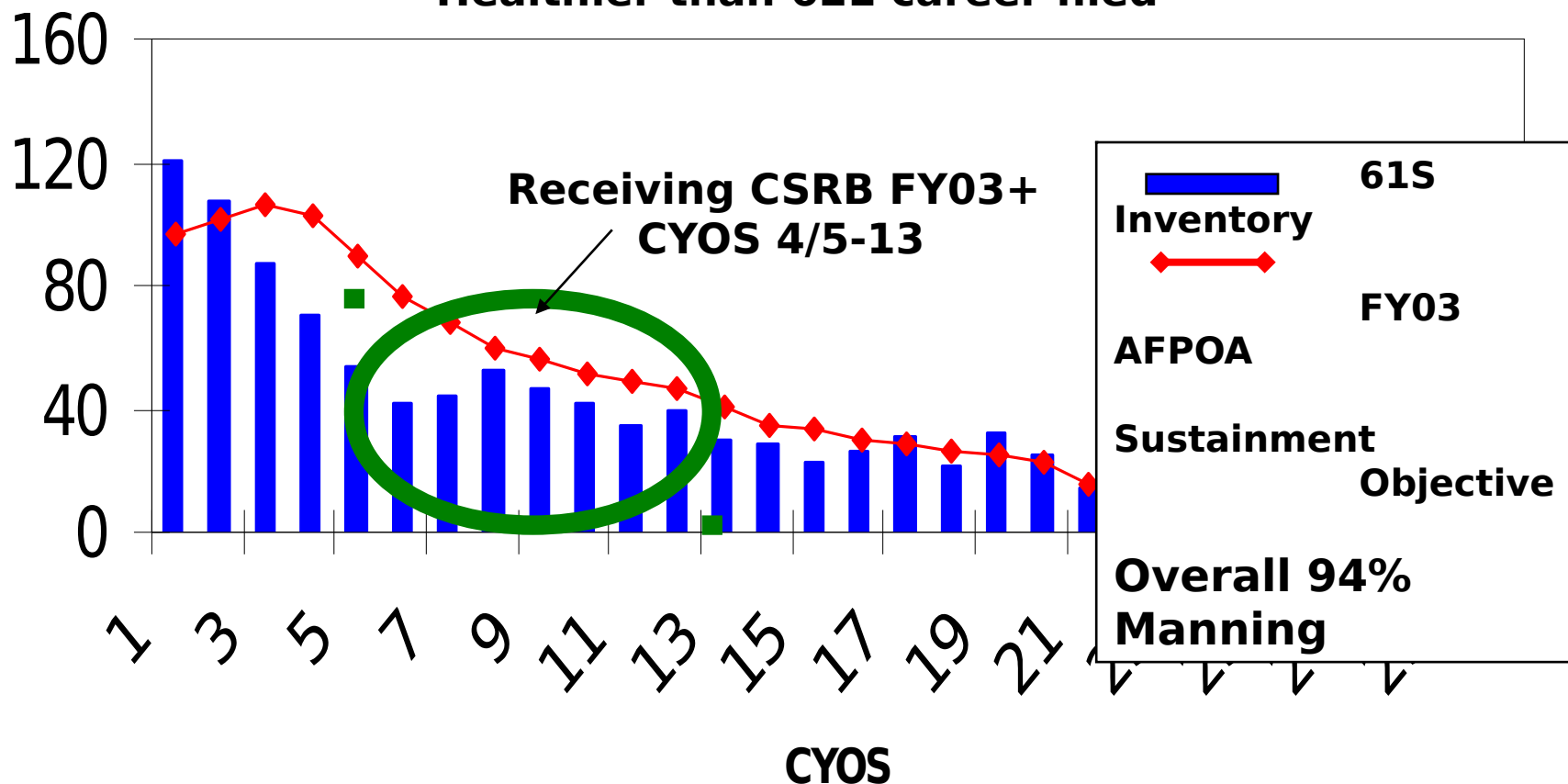
U.S. AIR FORCE

# FY03 61S Number/Grade Distribution

## Core 61S Inventory and Sustainment

Manning at CYOS 1-4/5

Healthier than 62E career filed

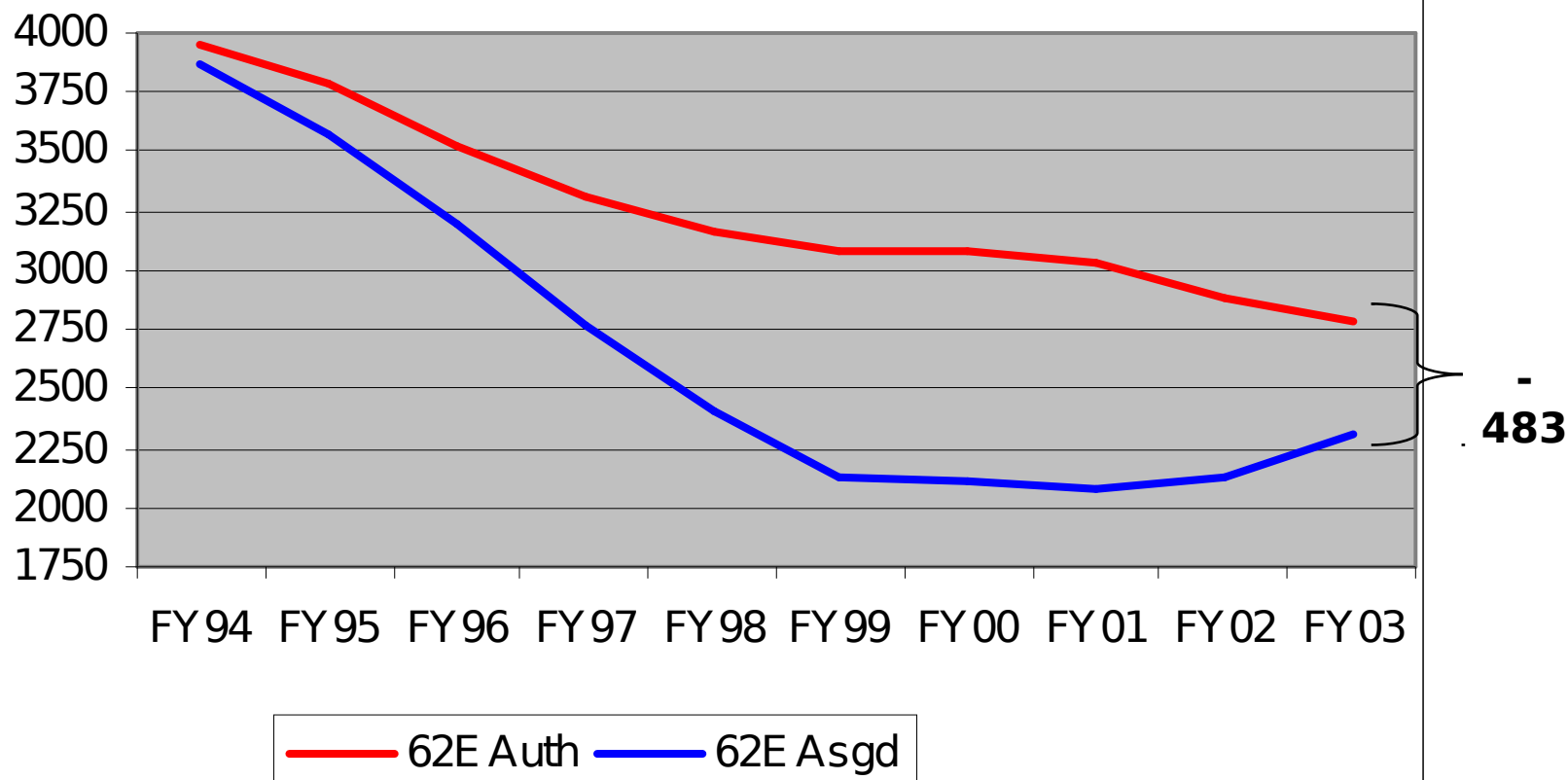




U.S. AIR FORCE

# Engineer Assigned vs. Authorized

**62E Manning (O-1 thru O-6)  
FY03 Historical Data**





**U.S. AIR FORCE**

# MIL, CIV and INDUSTRY Pay Comparisons

OCCUPATION	Base Salary	Non-Taxable Allowances <sup>1</sup>	Employee Costs <sup>2</sup>	TSP/401K	Add'l Taxable Income <sup>3</sup>	Fed Tax Liability <sup>4</sup>	Total Compensation <sup>5</sup>	Net Pay/Year <sup>6</sup>
<b>Military Engineer</b> O3 at 4 year point	\$48,234	\$15,072	\$4,440	0	0	\$4,194	\$63,306	\$54,672
<b>Civ Engineer 08XX</b> GS-13-01 WPAFB	\$69,114	0	\$8,580	0	\$1,000	\$7,479	\$70,114	\$54,055
<b>Non-Government Engineer</b> Non-Competing (WPAFB) and Subsistence Med (0/225/225), Dental (20/0/0), Life Insurance (20/25/25), Basic Retirement (~1.5%) (0/40/40) 4 Year Average Salary (NBS 2003) \$69,114 Social Security (280/340/340) and Medicare(50/80/80) Bonus	\$70,000	0	\$8,640	0	\$2,000	\$7,764	\$72,000	\$55,596

<sup>4</sup> Based on Base Pay + Additional Taxable Income with Married Filing Jointly and Standard Deduction (\$15,600)

<sup>5</sup> Base Salary + Non-Taxable Allowances+ Bonus

<sup>6</sup> Total Compensation - Fed Tax Liability - Employee Costs



U.S. AIR FORCE

# 2003 AF Retention Survey

## Career Intent of 2003 Officers with 3 - 5 Years of Service

<b><i>Rank</i></b>	<b><i>All Non-pilots</i></b>	<b><i>62XX</i></b>
<b>Company Grade (3 - 5 YOS)</b>	<b>n=1,664</b>	<b>n=203</b>
<b>% Stay until 20 years</b>	45	46
<b>% Separate before 20 years</b>	36	34
<b>% Undecided</b>	19	20

**Career intentions for the 62XXs do not differ from the career intent of all other non-pilot officers**





# 2003 AF Retention Survey

U.S. AIR FORCE

- Percent of 62XX Officers (3-5 years of service) Reporting What Influences Them to Make the Air Force a **Career** (very strong or strong responses)

Career Influence	62X n=93		All Non-pilots n=746		Diff. in Rank
	Rank	%	Rank	%	
Retirement program that affects you	1	80	2	79	-1
Job security	2	73	4	71	-2
Patriotism	3	70	1	85	2
Availability of dependent medical care	4	64	5	70	-1
Availability of medical care	5	63	3	75	2
Ability to contribute to the unit mission	6	61	7	65	-1
Opportunities to further your academic education	7	61	6	66	1
Choice of job assignment	8	59	9	63	-1
<b>Bonuses/Special Pay</b>	9	59	19	48	-10
Availability of dental care	10	54	12	58	-2
Say in base of assignment	11	54	13	56	-2
<b>Pay and allowances</b>	12	54	8	64	4





# 2003 AF Retention Survey

U.S. AIR FORCE

- Percent of 62XX Officers (3-5 years of service) Reporting What Influences Them to **Separate** from the Air Force (very strong or strong responses)

Separation Influence	62X n=69		All Non-pilots n=598		Diff. in Rank
	Rank	%	Rank	%	
Availability of comparable civilian jobs	1	61	1	52	0
Compatibility with spouse career/job	2	59	2	49	0
Number of PCS moves	3	44	4	42	-1
Potential for outsourcing and privatization of career field	4	38	9	33	-5
Air Force officer/enlisted evaluation systems	5	38	12	29	-7
Choice of job assignment	6	37	3	43	3
Satisfaction with your current career field	7	37	8	37	-1
Overall job satisfaction	8	36	6	39	2
Say in base of assignment	9	33	5	41	4
Opportunities for skills training/professional development	10	30	11	29	-1
Promotion opportunity	11	25	23	20	-12
Recognition of your efforts	12	22	13	28	-1
Pay and allowances	20	14	27	17	-7



# 1999 AF Retention Survey

U.S. AIR FORCE

- Percent of 62XX Officers Reporting What Influences Them to Make the Air Force a **Career** (very strong or strong responses)

Career Influence	62X n=36	
	Rank	%
Availability of medical care	1	65
Overall job satisfaction	2	62
Choice of job assignment	3	59
Opportunities to further your academic education	4	58
Retirement program that affects you	5	54
Leadership at unit level	6	53
Job security	7	50
Availability of dependent medical care	8	48
Availability of dental care	9	47
Say in base of assignment	10	43
Availability of commissary services	11	36
Availability of dependant dental care	12	32
Pay and allowances	20	14



# 1999 AF Retention Survey

U.S. AIR FORCE

- Percent of 62XX Officers Reporting What Influences Them to **Separate** from the Air Force (very strong or strong responses)

Separation Influence	62X n=61	
	Rank	%
Choice of job assignment	1	64
Say in base of assignment	2	59
Retirement program that affects you	3	53
Availability of comparable civilian jobs	4	52
Air Force officer/enlisted evaluation systems	5	37
Promotion opportunity	6	32
<b>Pay and allowances</b>	7	32
Overall job satisfaction	8	31
Leadership at Unit level	9	31
Number of PCS moves Opportunities for skills training/professional development	10	29
Compatibility with spouse career/job	11	28
Leadership at wing or equivalent level	12	23

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Awards***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA





**U.S. AIR FORCE**

---

# ***S&E Awards***

- **Three new AF-level awards created to recognize the S&E workforce**
  - **Air Force Outstanding Scientist**
  - **Air Force Outstanding Engineer**
  - **Air Force Outstanding Science and Engineering Educator Awards**
- **Two awards, AF Outstanding Scientist and AF Outstanding Engineer, have multiple award categories**
  - **Recognize different levels of experience (junior to senior levels) for both military and civilians**
  - **Categories based on the number of years an individual has worked in a specific area**
- **Awards open to all AF S&Es regardless of duty location or type of S&E work being performed**
- **Winners at the MAJCOM/FOA/DRU level will compete at the AF level**
- **SEAC members vote to select the winners**
- **Winners receive a trophy, recognition ribbon/pin, and a three-day pass**



# ***2002 AF S&E Award Winners***

**U.S. AIR FORCE**

---

- **AF Outstanding Scientist**
  - **Junior Military**      Capt Wynn Sanders      AFMC
  - **Mid Grade Military**      Maj Scott Walter      AFMC
  - **Senior Military**      Lt Col JoAnn Erno      AFMC
  - **Junior Civilian**      Dr. Richard Vaia      AFMC
  - **Mid Grade Civilian**      Mr. Kenneth Levi      AETC
  - **Senior Civilian**      Dr. Dennis Goldstein      AFMC
  - **Team**      Analysis Division      ACC
- **AF Outstanding Engineer**
  - **Junior Military**      Capt Orval Powell      ACC
  - **Mid Grade Military**      Capt Shawn McCamish      ACC
  - **Senior Military**      Maj William Hack      AMC
  - **Junior Civilian**      Ms. Charlotte Gerhart      AFMC
  - **Mid Grade Civilian**      Mr. Curtis Cadwallader      AFMC
  - **Senior Civilian**      Mr. Kenneth Boydston      ACC
  - **Team**      WCMD      AFMC
- **AF Outstanding Science and Engineering Educator**
  - **Overall**      Lt Col David Jacques      AETC

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Career Field Statistics***



**U.S. AIR FORCE**

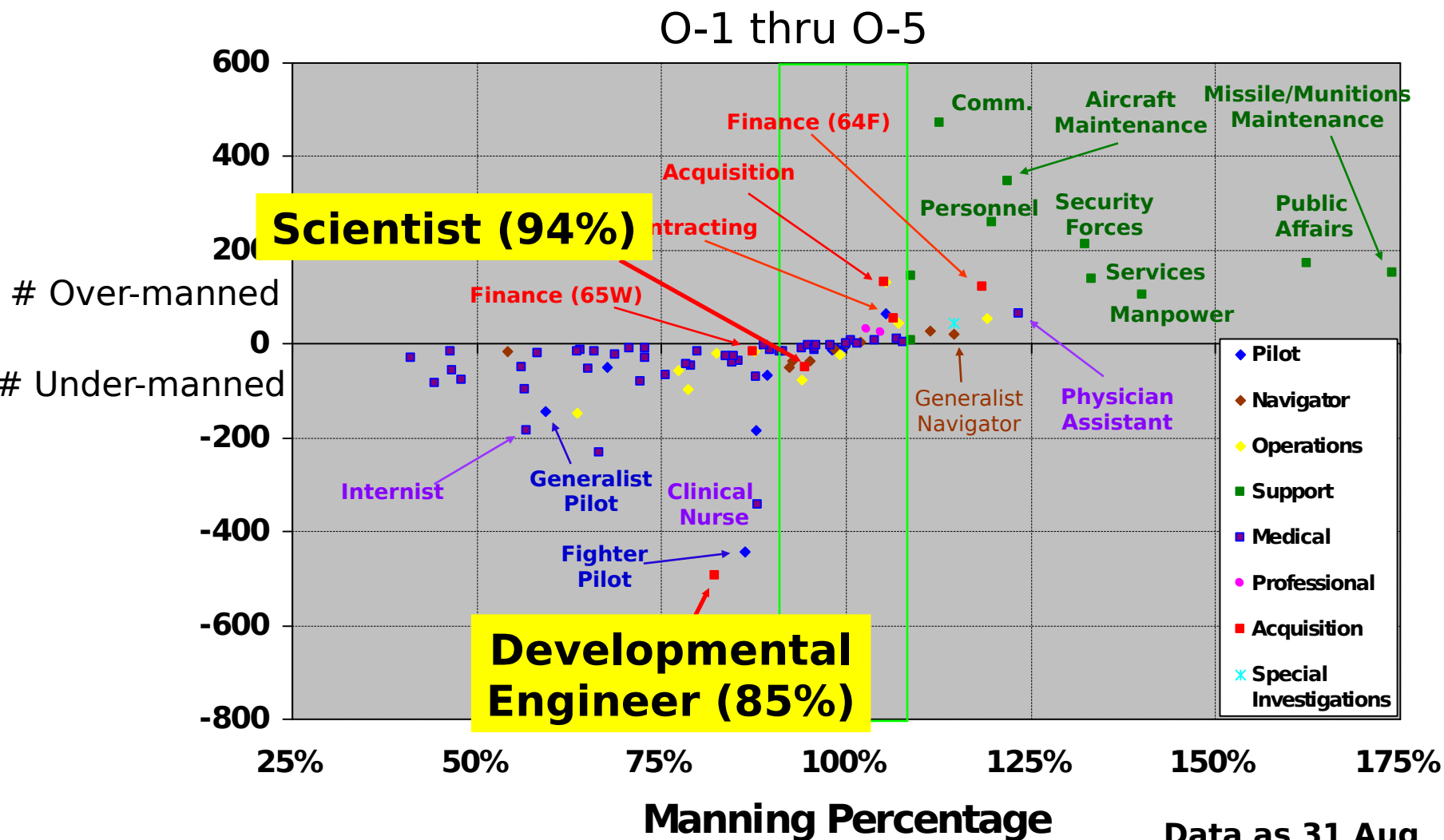
Washington DC  
1560 Wilson Blvd, Rosslyn VA





U.S. AIR FORCE

# Current Military Manning (AF)

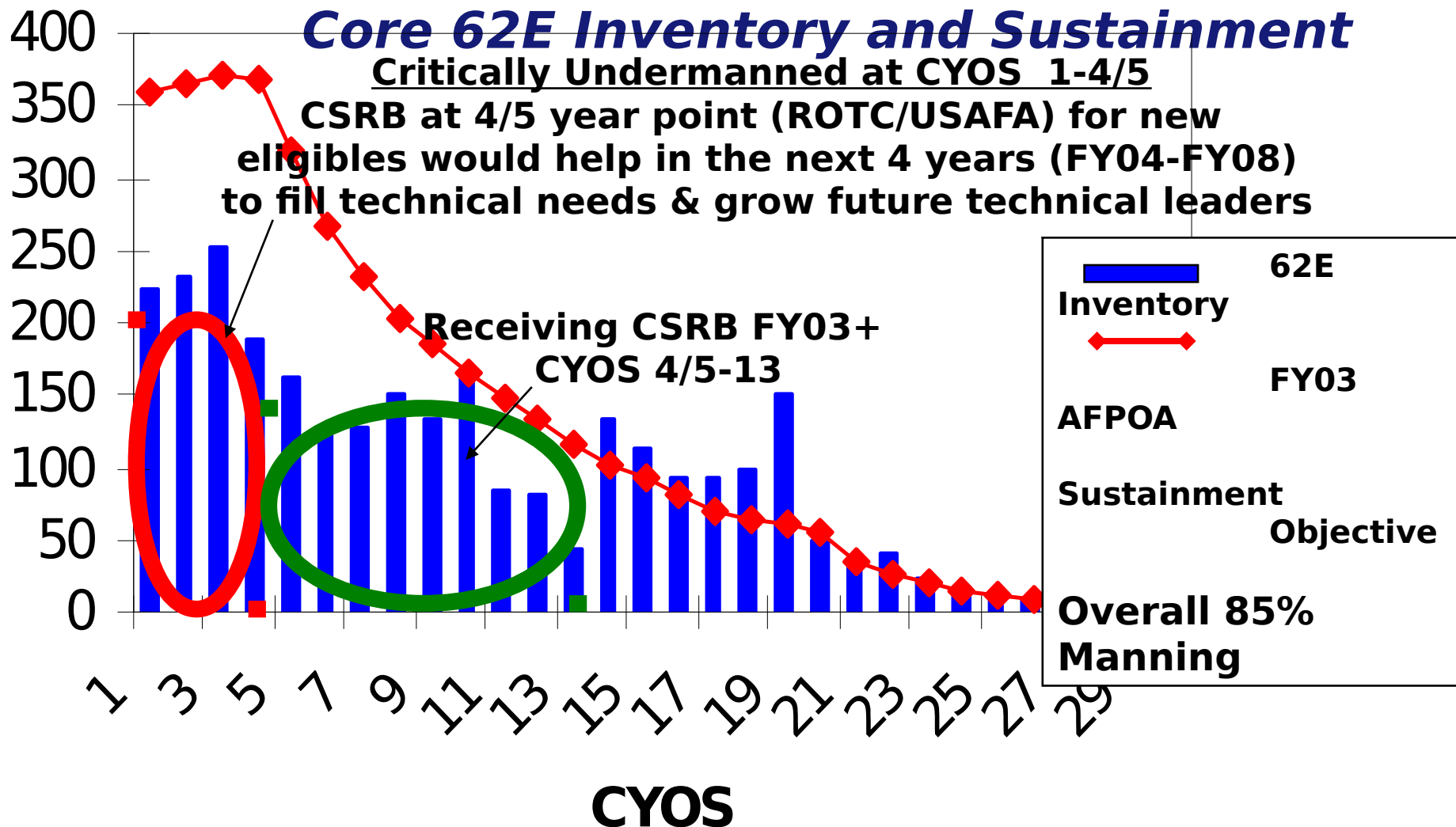






# FY03 62E Number/Grade Distribution

U.S. AIR FORCE





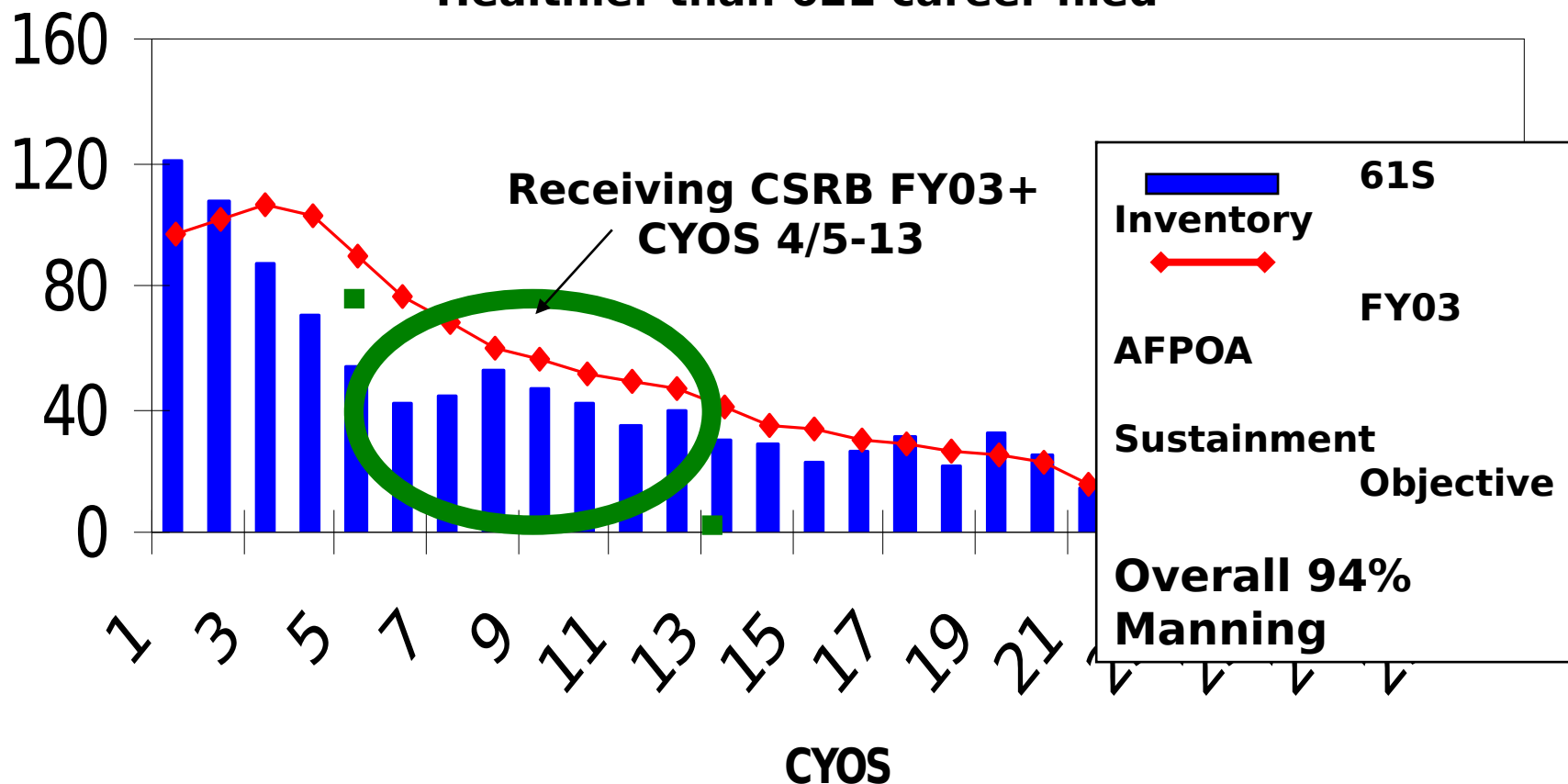
# FY03 61S Number/Grade Distribution

U.S. AIR FORCE

## Core 61S Inventory and Sustainment

Manning at CYOS 1-4/5

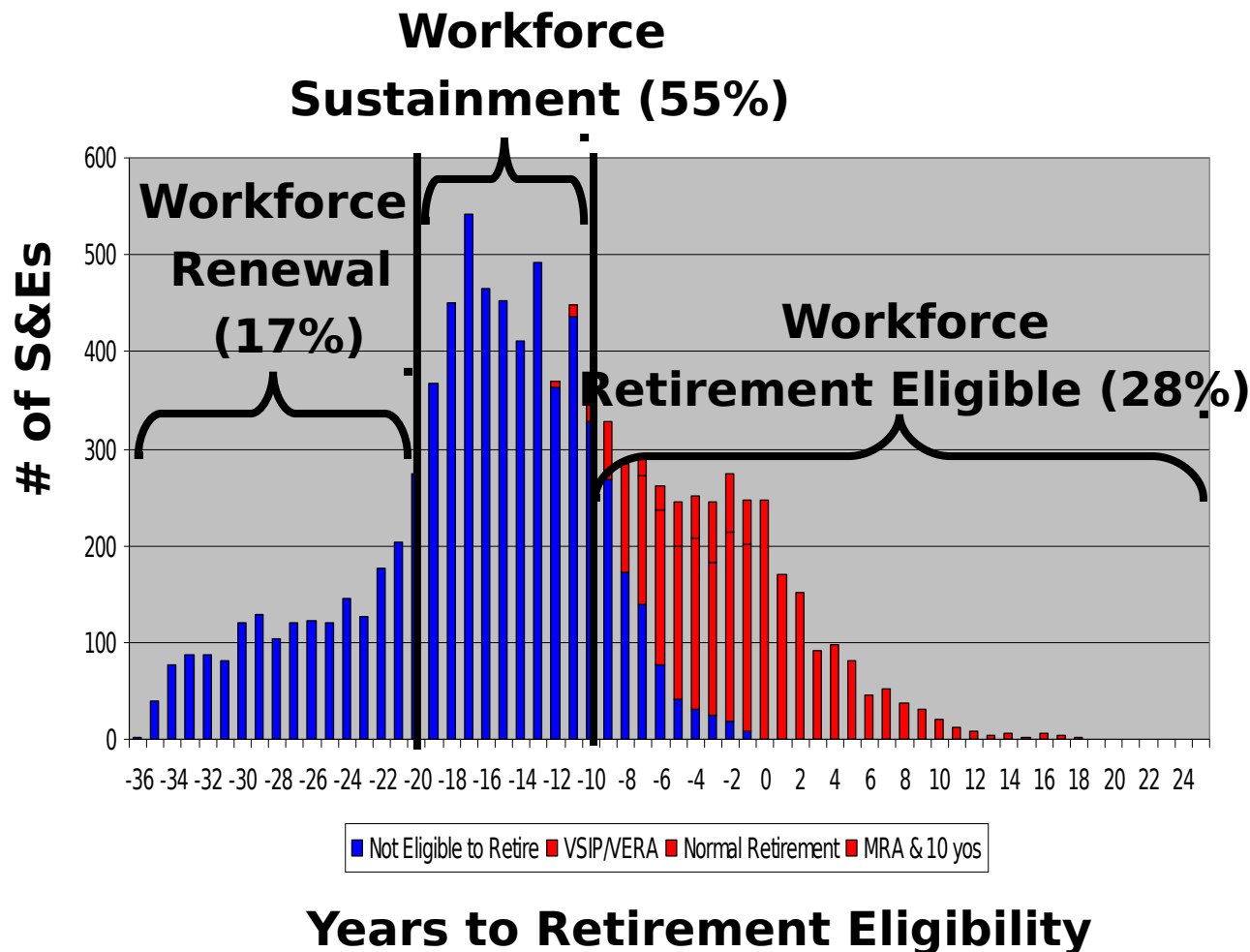
Healthier than 62E career filed





U.S. AIR FORCE

# FY04 Civilian S&E Inventory Population vs. Retirement Eligibility



- **Unbalanced Distribution of Workforce**
- **Retirement Eligible: 2781 experienced S&Es**
- **More than 1,000 employees are eligible to retire (Red) than are currently in Workforce Renewal**
- **AF needs to attract and retain critical S&E talent via recruitment and retention bonus programs for Workforce Renewal and Workforce Sustainment**

# ***Headquarters U.S. Air Force***

---

***Integrity - Service - Excellence***

## ***Scientist and Engineer Advisory Council (SEAC)***



**U.S. AIR FORCE**

---

Washington DC  
1560 Wilson Blvd, Rosslyn VA



**U.S. AIR FORCE**

# ***Scientist and Engineer Advisory Council (SEAC)***

---

- The SEAC is responsible for approving policy and overseeing implementation of
    - Air Force policies, programs and actions designed to benefit the S&E workforce
  - Members: GOs and SESs representative of the composition of the workforce
  - Recruitment Strategy
  - Policy areas within the purview and influence of the SEAC include, but are not limited to:
    - Military Accession Strategy
    - Retention Strategy
    - Education & Training
      - Advanced Academic Degrees
      - Acquisition Professional Development Program
      - Long Term Training
      - Tuition Assistance
      - Professional Military Education
      - Boards & Panels
    - Non-Rated Prioritization Plan
  - Development
    - Career Development Guide
    - Mentoring Web-Site
    - AF Intern Program
    - Career Broadening
    - Promotion Evaluation Patterns
    - Boards & Panels
  - Workforce Analysis
    - Requirements
    - Future Requirements
  - Workforce Shaping Initiatives
  - Recognition Programs
-

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***Military Force Development***



**U.S. AIR FORCE**

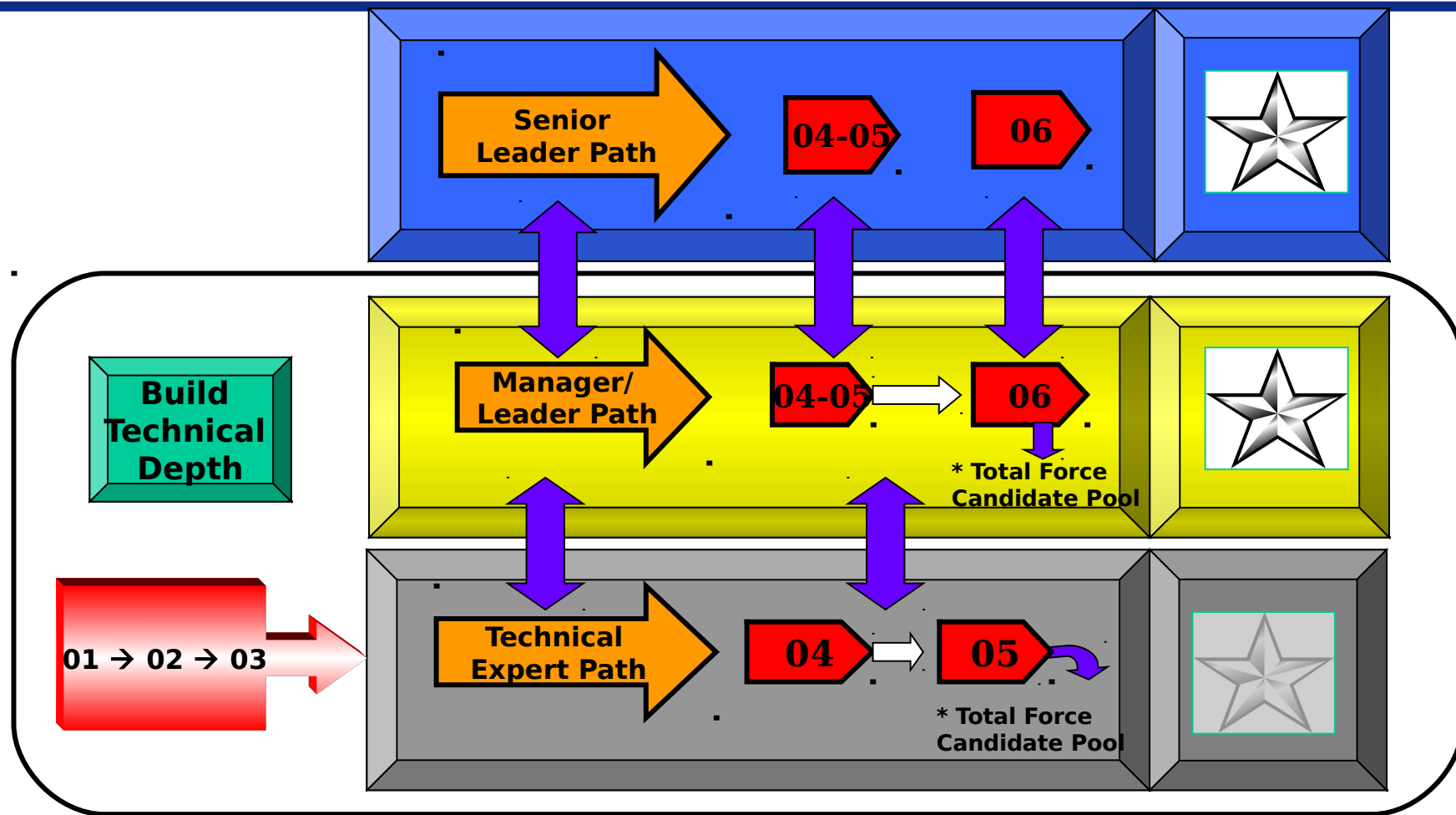
Washington DC  
1560 Wilson Blvd, Rosslyn VA





U.S. AIR FORCE

# Military S&E Career Paths



\* Providing an option to move military service to civil service, reserve, guard, or DoD contractor to retain critical skills



U.S. AIR FORCE

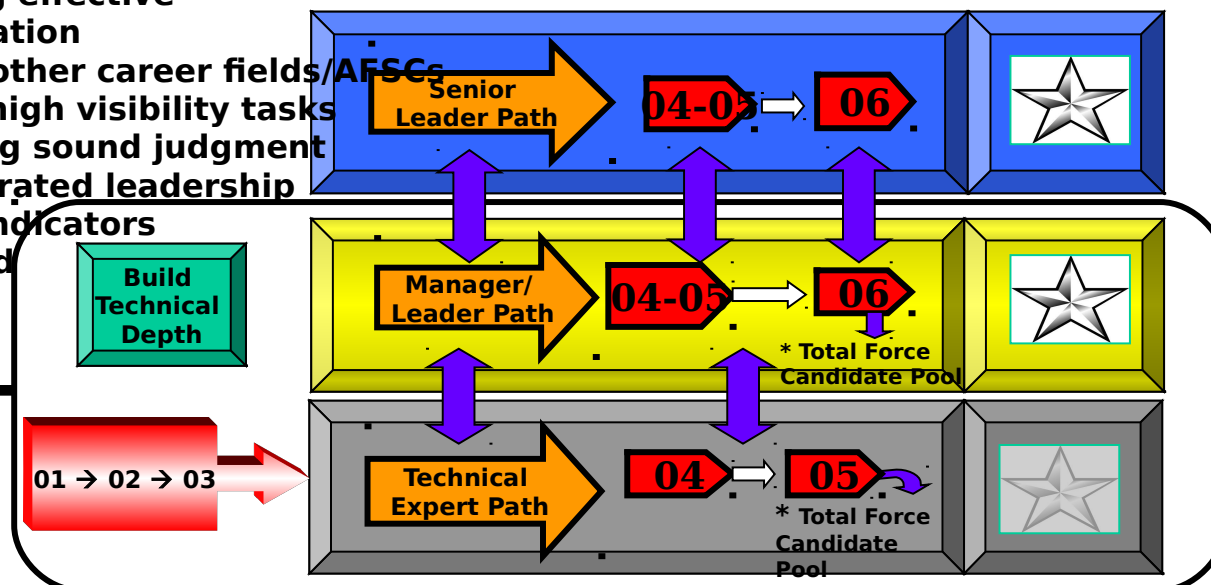
# S&E Development - Senior Leader, Manager/Leader and

- Fostering teamwork and collaboration
- Fostering effective communication
- Skills in other career fields/AFSCs
- Excel in high visibility tasks
- Exercising sound judgment
- Demonstrated leadership
- Quality indicators
- Command

## Leadership

## Technical

- Adapting
- Inspiring Trust
- Demonstrating tenacity
- Leading by example
- Building relationships
- Mentoring
- Strategic thinker
- Exceptional speaker
- Supervisory skills
- Demonstrated vision



\* Providing an option to move military service to civil service, reserve, guard, or DoD contractor allows us to retain

## Technical

- Author on journal articles
- Ability to present technical project results
- Technical MS and/or PhD (IEEE, AIAA, ASME, etc)
- Understand the roles & responsibilities of S&E's in other Centers/MAJCOMS
- Active in professional societies
- Direct large-scale projects
- Technical depth (Lab, ALC, SPO, Test Center)
- Technical instructor
- Technical expert
- Achieve significant tech contributions leading to honors and awards

*Integrity - Service - Excellence*





**U.S. AIR FORCE**

# ***Military Force Development***

---

- **The AF's method of growing leaders at all levels**
  - **Equips Airmen with the education, training and experience they will need for the future**
- **Accomplishes the AF missions today and tomorrow**
  - **No more “square filling” for education, training and assignments**
  - **Deliberately improves your skills**
  - **Uses your skills more effectively**
  - **Meets your goals and expectations and explains more clearly your potential and opportunities**
- **Gets the right people in the right job at the right time with the right skills to fight and win**



U.S. AIR FORCE

# ***Leadership Requirements*** ***(Enduring Competencies/Business Skills)***

## **Enduring Competencies**

### Personal Leadership

- **Exercising sound judgment**
- **Adapting**
- **Inspiring Trust**
- **Leading Courageously**
- **Demonstrating Tenacity**
- **Leading by Example**
- **Assessing Self**

### Leading People/Teams

- **Inspiring/Empowering & Exercising Authority**
- **Influencing and Negotiating**
- **Attracting, Developing and Retaining Talent**
- **Fostering Teamwork and Collaboration**
- **Building Relationships**
- **Fostering Effective Communication**
- **Mentoring**

### Leading the Institution

- **Commanding**
- **Creating and Demonstrating Vision**
- **Shaping Strategy**
- **Translating Strategy**
- **Driving Transformation**
- **Thinking/Working Across Boundaries**
- **Applying Resource Stewardship**
- **Driving Execution**
- **Driving Continuous Improvement**

## **Business Skills**

- **Personnel Management**
- **Financial Management**
- **Integrating Information Technology**
- **Systems Integration**



U.S. AIR FORCE

# ***Force Development***

## ***Active Duty Officer Development***

---



---

***Integrity - Service - Excellence***



U.S. AIR FORCE

# Military Force Development: and Events

Players



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**Summer Assignment Cycle**  
(RNLTD Jun-Sep)

**Fall Assignment Cycle**  
(RNLTD Oct-Jan)

**Spring Assignment Cycle**  
(RNLTD Feb-Mar)

Events

S&E  
DT

Special Selection (AAS, Boards)

PB  
LTC  
(Line)

S&E  
DT

PB  
Maj  
(Line)

S&E  
DT

DE  
Board  
s

PB  
Col  
(Line)

Training (Specialty, Academic, PME)	Officer Development Plan
-------------------------------------	--------------------------

*Integrity - Service - Excellence*



# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***Military Development Teams***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA





**U.S. AIR FORCE**

# ***Military Development Teams (DT)***

---

- **Established by the CSAF in his 6 Nov 02 Sight Picture**
  - **Responsible for managing Force Development within a career field**
  - **Responsible for oversight of the development of personnel to meet functional community requirements**
- **Composition:**
  - **Career Field Manager**
  - **Appropriate functional representatives**
  - **AFPC assignment team representative**
  - **Appropriate MAJCOM POCs**



**U.S. AIR FORCE**

# ***Military Development Team Responsibilities***

---

- **Responsible for developmental oversight of personnel to meet functional community requirements**
  - **Considers unique characteristics & requirements of career field with development opportunities to meet institutional needs when determining career progression**
  - **Evaluates developmental opportunities within the functional force structure**
  - **Recommends appropriate developmental assignments and vectors for individual officers within and outside the career field**
  - **Provides developmental feedback to officers and commanders via the Officer Development Plan**
  - **Recommends individual officers for developmental assignments (e.g., Education, Special Duty)**
  - **Provides input into the Special Selection processes as needed (e.g., Squadron Command, Developmental**

**Provide oversight for S&E career field health and development**



**U.S. AIR FORCE**

# ***61 DT Membership***

- **SAF/AQR (Chair)**                      **Col Craig Kimberlin (S&E CFM)**
- **AFSPC (Space)** **Col Rakesh Dewan**
- **USAFA**      **Col John Andrew**
- **AFMC (Acquisition)**      **vacant**
- **AFRL (Labs)**      **Col Thurmon Deloney**
- **ACC (Operational)**      **Col Kid Curry**
- **AFOTEC (Test)** **Col Scott Goehring**
- **AFIT**      **Col(s) Patricia Coomber**
- **AFTAC (Chem/Biol)**      **Col Allan Beck**
- **AFSAA**      **Col Roxann Oyler**
- **NRO**      **Col Doug Loverro**
- **AF/XON (C-CBRN)**      **Col Jimmy Hyatt**
- **Northcom (Behavioral)**      **Col Doc Warr**
- **Ofc of the Ch Scientist**      **Col Dan DeForest**





**U.S. AIR FORCE**

# ***62 DT Membership***

- **SAF/AQR (Chair)**                      **Col Craig Kimberlin (S&E CFM)**
- **SMC (Engineering)**                **Col Rakesh Dewan**
- **AFMC (Engineering)**            **Col Charles Czarniecki**
- **ESC (C3I)**   **Col Steven Rogers**
- **AEDC (Test)**              **Col Vince Albert**
- **AAC (Munitions)**   **Col Paul Coutee**
- **ALC (Sustainment)**            **Col(s) Rob Fredell**
- **AFRL (Labs)**              **Col Tom Buter**
- **AIA (Intel)**   **Col Bob Downs**
- **ASC (Aircraft)**            **Col Eileen Bjorkman**
- **AFIT**              **Col James Godsey**
- **NRO**              **Col Laura Kennedy**
- **Special Programs**              **Col David Bujold**
- **Space**              **Col Pamela Hodge**
- **SMC (Launch)**            **Col Joseph Boyle**
- **USAFA**              **Col Tim Brotherton**

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***Officer Development Plan (ODP)***



**U.S. AIR FORCE**



# ***Officer Development Plan***

**U.S. AIR FORCE**

---

- **Officer Development Plan (ODP) - a modified Preference Worksheet**
  - **Capabilities added for individual inputs for near-term assignments, long-range intentions, and developmental goals**
  - **ODP provides communication between officers, their leaders, assignment team, and their Development Team (DT)**
- **Each officer will complete their ODP and forward it to their commander or staff-level equivalent**
  - **Commanders review the ODP, and provide feedback**
    - **Ensures it is a portrayal of the officer's goals as well as a realistic reflection of their abilities and future developmental objectives**
- **The ODP is forwarded to the DT and**

**Every officer should carefully craft their ODP and keep it current!**



# ***Officer Development Plan***

**U.S. AIR FORCE**

---

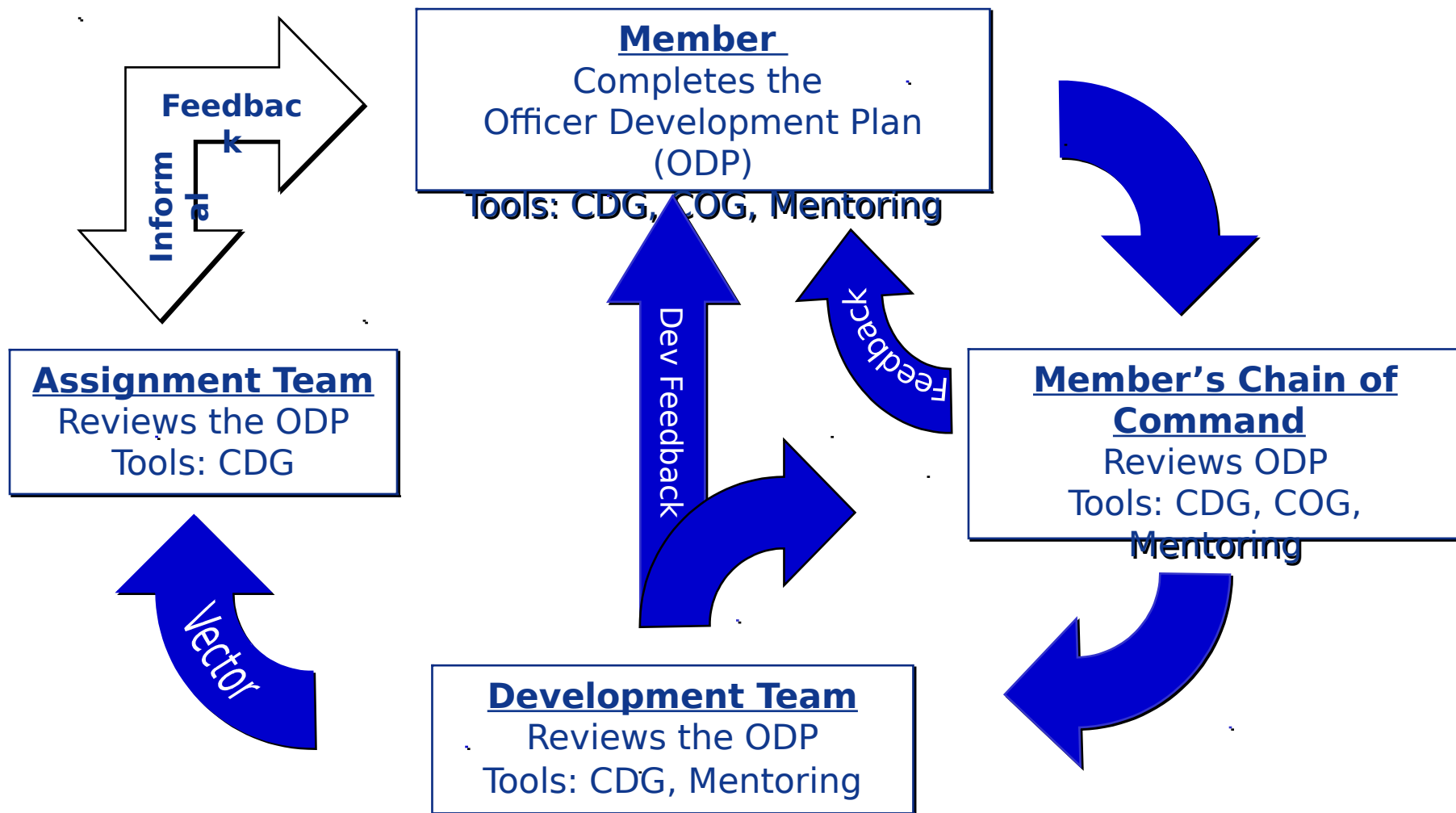
- **After providing feedback and making any needed adjustments, commanders add their comments and forward the ODP to the DTs for their review**
  - **DTs review ODPs and provide feedback**
  - **The DTs then forward their recommendations to the applicable Officer Assignment Team (OAT)**
    - **DT recommendation serves as a “vector” to guide and assist OAT in the assignment process**
  - **Based on their best judgment, DTs will then provide developmental vectors via ODP**
- **The completed ODP will also be used by the OAT**
  - **OATs take the DT’s vectors and work to find the best match between the ODP, DT vectors, and Air Force Requirements**

**The ODP is a developmental game plan ... not just a specific job request**



U.S. AIR FORCE

# Developmental Review Process



# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***Developmental Education (DE)***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA





**U.S. AIR FORCE**

# ***Developmental Education (DE)***

---

- **Professional Military Education now called DE to reflect changed opportunities that reflect the evolving nature of force development**
  - **Not everyone needs the same “cookie-cutter” education to best serve the Air Force or the individual**
  - **New focus on providing the appropriate DE at the right time in your career**
  - **Scope of education and number of opportunities has increased significantly and will continue to rise over the next few years**
  
- **Three different levels of Developmental Education**
  - **First level - Basic Developmental Education, or BDE**
  - **Second level - Intermediate Developmental Education, or IDE**
  - **Third level - Senior Developmental Education, or SDE**



# ***Developmental Education (DE)***

**U.S. AIR FORCE**

---

- **Basic Developmental Education (BDE)**
  - The common leadership foundation required for future growth and responsibility
  - Builds upon skills from commissioning sources and technical training courses
  - Builds deep competencies within initial career field
  - **Examples: Aerospace Basic Course, SOS, the Air Force Intern Program, and AFIT**
- **Intermediate Developmental Education (IDE)**
  - Preparation for future duties, such as developmental assignments, command opportunity, and increased leadership responsibility
  - All officers will be managed deliberately and engaged in developmental activity
  - Many receive developmental assignments
    - May be outside primary career fields or within present functional family
  - Expands breadth of experience and widens perspectives on integrating tactical functions to meet the AF mission
  - **Examples: ACSC, AFIT, and the Naval Postgraduate School**
- **Senior Developmental Education (SDE)**
  - Further broadens awareness of issues facing the AF, DoD and National Security
  - Prepares senior officers to participate in the leadership of our institution
  - **Examples: Air War College, National War College, ICAF, and sister-service schools**





**U.S. AIR FORCE**

# ***Developmental Education (DE)***

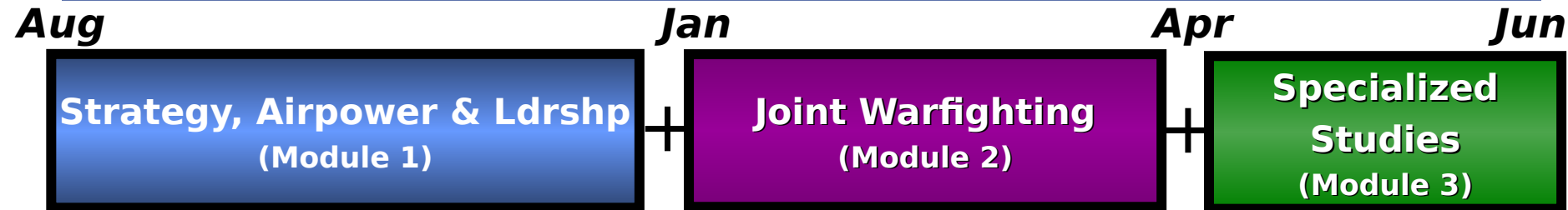
---

- **ACSC and AFIT revamped**
  - **Better prepares officers for their follow-on assignments**
- **3 different IDE tracks can be pursued**
  - **Development beyond primary specialty**
  - **ACSC in residence - 3 modules**
    - **First: focuses on specific Air Force core competencies**
    - **Second: addresses AF contributions to joint warfighting**
    - **Third: learning about complementary areas outside of career field**
- **Education and modified ACSC**
  - **This program includes**
    - **Wide variety of AFIT degrees and fellowships**
    - **Robust version of the ACSC, distance-learning curriculum**
      - **Grants Joint PME Phase I credit**
- **ACSC by distance learning**
  - **Re-designed to better reflect our evolving mission**



U.S. AIR FORCE

# IDE Curriculum



**12-18 Months**



**ACSC Distance Learning**  
**[Reduced from 73 to 50 lessons]**

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***Advanced Academic Degrees***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA





U.S. AIR FORCE

# ***Changes to Advanced Academic Degree (AAD)***

## ***Process***

- **Transition from requirements-based to inventory-based system for AADs--meets Force Development concept**
  - **More opportunities across active duty force**
    - **Quotas increase substantially**
      - **FY05 - 1,650; FY07 - 1,900; FY08 - 1,974**
  - **Functional Development Teams will choose who goes to school at O-1 through O-3 level**
    - **DTs recommend O-4s to Developmental Education Designation Board**
- **AF/DP continues to develop process to implement inventory-based system**
- **Senior Leadership Guidance remains**
  - **Strong emphasis to fill S&E quotas. . .first!**
  - **SecAF focus on “high tech” degrees versus “soft core”**
  - **SecAF guidance: “AFIT first, then NPS, then AFIT/CI programs”**
  - **Better tracking/utilization of graduates by AFPC**



DRAFT

DRAFT

# **Headquarters U.S. Air Force**

*Integrity - Service - Excellence*

## **DRAFT - Civilian S&E Force Development**



**U.S. AIR FORCE**

DRAFT

Washington DC  
1500 Wilson Blvd, Rosslyn VA



DRAFT



U.S. AIR FORCE

# Civilian Force Development

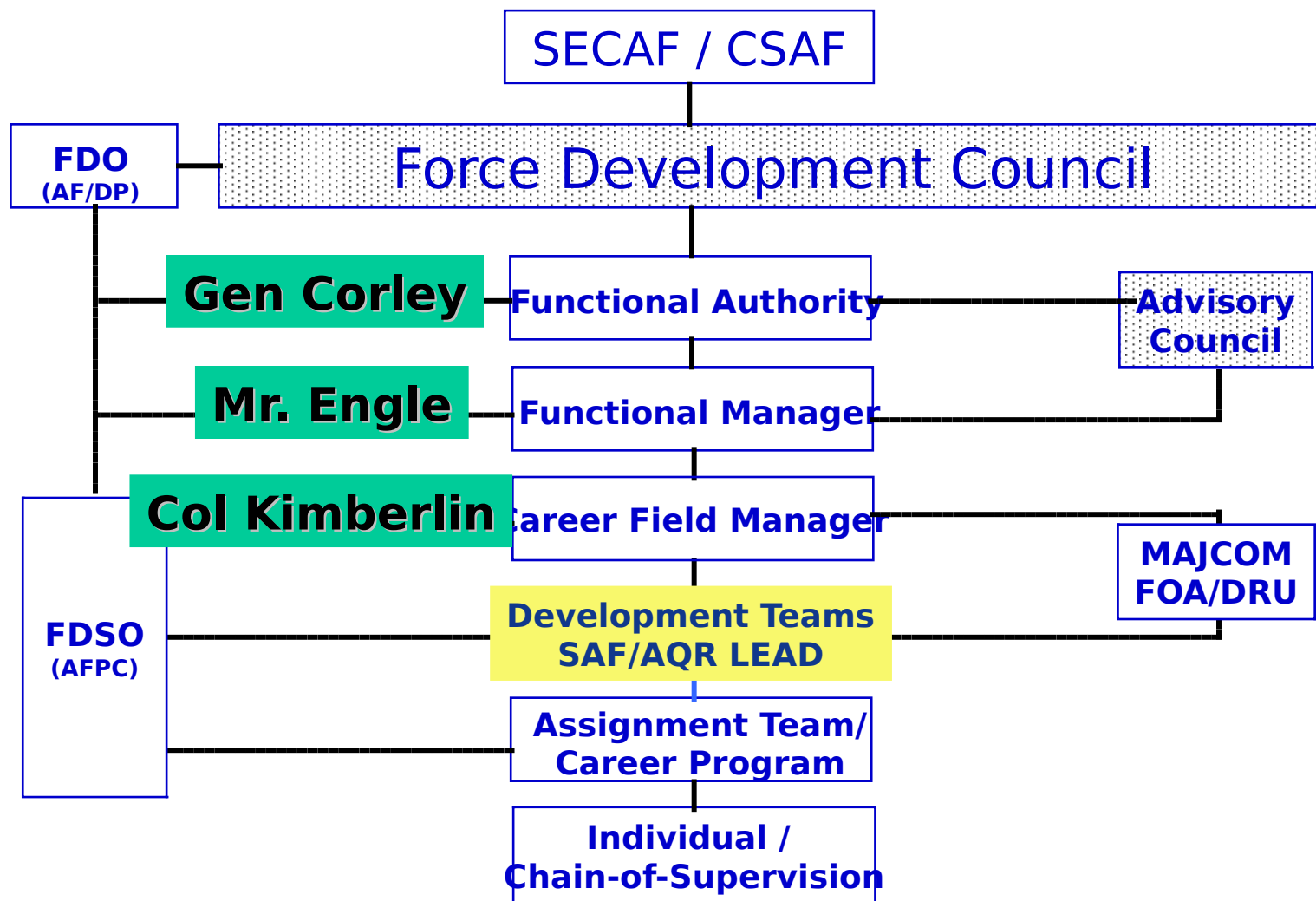
- **Goal: Deliberate, connected, career-oriented development to enable the civilian element of Total Force Development**
- **Civilian Force Development provides...**
  - *Clearly stated goals* **for development - Career Templates and Guides**
  - *Improved assessment* **of individuals via Career Development Plans and Development Teams**
  - *Connected development* **over the course of a career**
  - *Integrated leadership education* **through all levels (tactical, operational, strategic)**
- **Compatible with Officer Force Development - enables Total Force Management**
- **MAJCOM S&E Leadership also providing local development guidance/briefings**





U.S. AIR FORCE

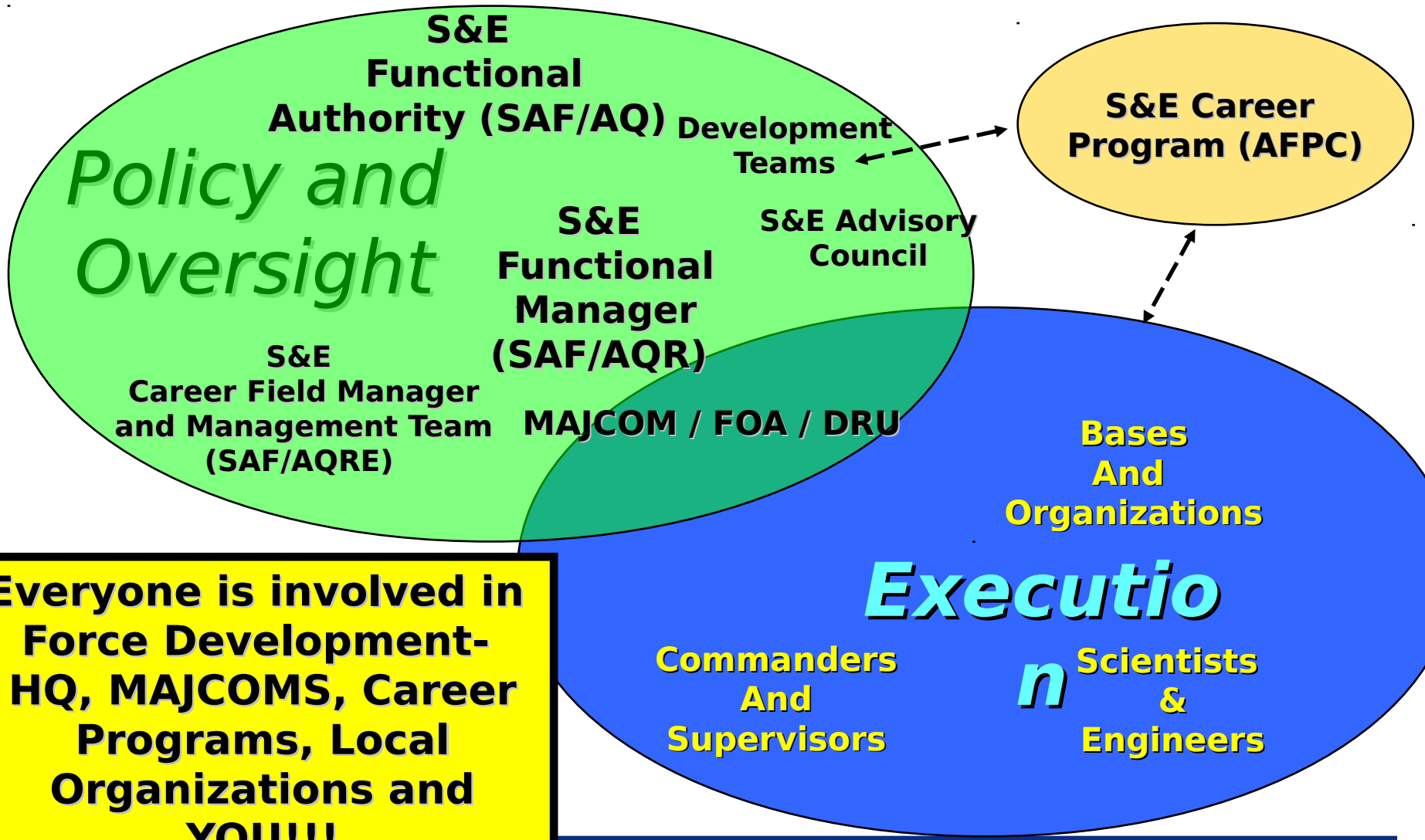
# Force Development Management Structure





# Roles and Responsibilities

U.S. AIR FORCE



**Everyone is involved in Force Development- HQ, MAJCOMS, Career Programs, Local Organizations and YOU!!!**

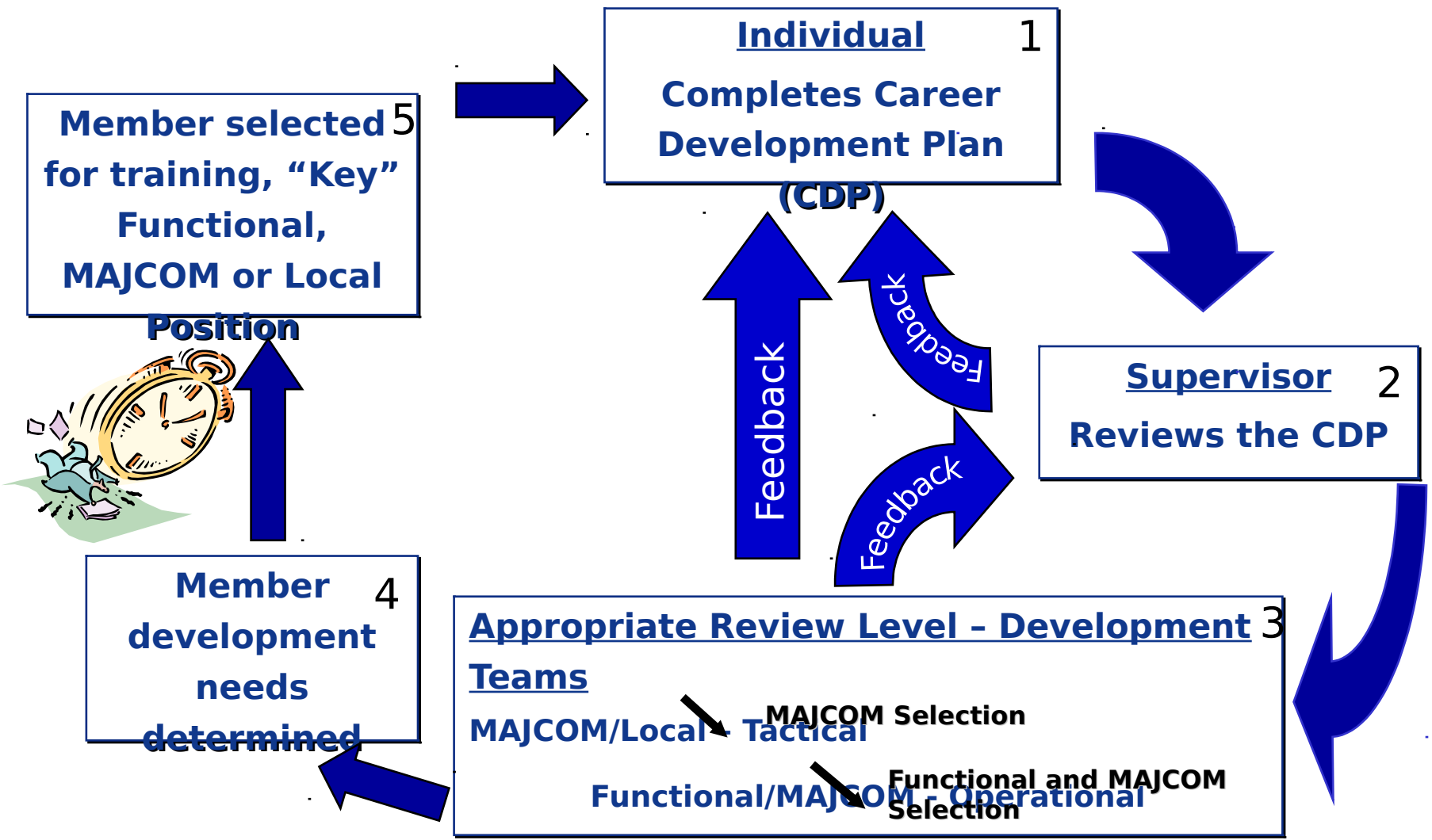






# S&E Force Development

U.S. AIR FORCE





U.S. AIR FORCE

# S&E Development - Tactical, Operational, and Strategic

## Leadership

### TACTICAL

- Follow S&E Career Development Guide (CDG)
- Develop Depth & Initial Leadership Skills
- Eligible for Tactical Local positions to GS-15 Level

### OPERATIONAL GS 13-15

- Develop Breadth in another Function
- Further Develop Leadership Skills
- Be Mobile - SES Template

## Leadership

### STRATEGIC GS-15

- Develop Corporate Strategic Leadership Skills and Greater Breadth
- Eligible for "KEY" AF GS-15 positions

## Technical

### TACTICAL

- Author on journal articles
- Ability to present technical project results
- Technical MS and/or PhD

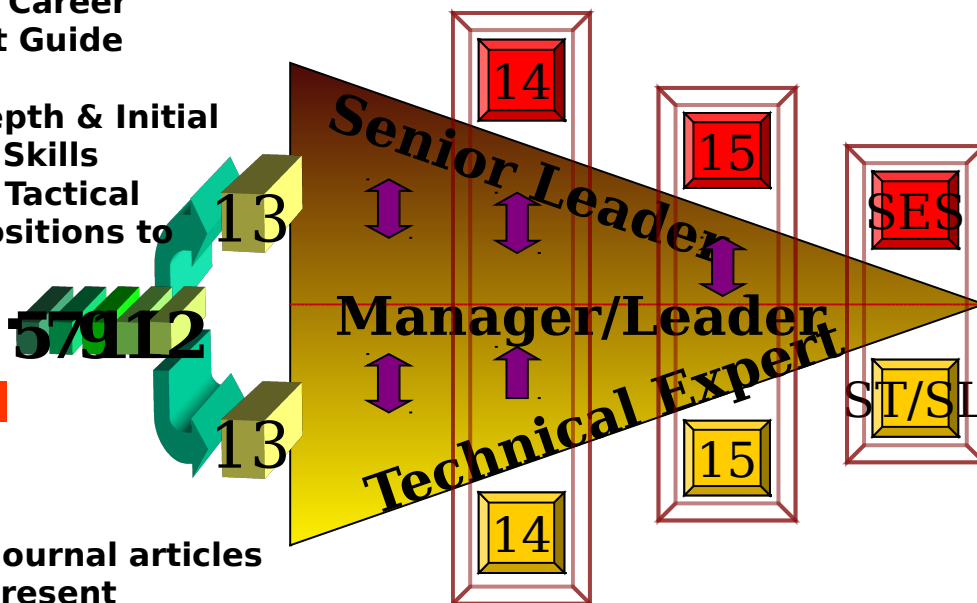
### OPERATIONAL GS 13-15

- Technical expert
- Direct large-scale projects
- Develop and maintain relationships with operational user
- Recognized by organization and peers as expert in the field

## Technical

### STRATEGIC GS-15

- Leader in professional societies (IEEE, AIAA, ASME, etc)
- Adjunct professor
- Technical depth (Lab, ALC, SPO, Test Center, NAIC)
- Technical instructor
- Recognized as expert by external Society



# ***Headquarters U.S. Air Force***

---

***Integrity - Service - Excellence***

## ***National Security Personnel System (NSPS) and Best Practices (BP)***



**U.S. AIR FORCE**

---



U.S. AIR FORCE

# ***National Security Personnel System (NSPS) and Best Practices (BP) Updates***

- **Title XI, Civilian Personnel Matters, Chapter 99, Section 02, states AFRL is exempt from NSPS and BP until 2008**
  - **Review of NSPS and Lab Demo systems after 2008**
- **Previous BP Federal Register (Apr 03) is being revamped**
  - **IPTs currently reworking sections of Register**
- **NSPS deployment will be in CY 2005**



U.S. AIR FORCE

# ***Need for Change to Civilian Personnel System***

---

- **Demands an agile system for an agile adversary**
- **Provides a key pillar in the Defense Secretary's transformation initiative**
- **Allows civilians to contribute as a more integrated part of the total force**
- **Addresses high projected losses and keen competition**
- **Overcomes inflexible Title 5 system**
- **Implements tested DoD best practices**
- **Streamlines competing pay plans and personnel systems in the Department of Defense**



U.S. AIR FORCE

# ***NSPS and Best Practices (BP)***

---

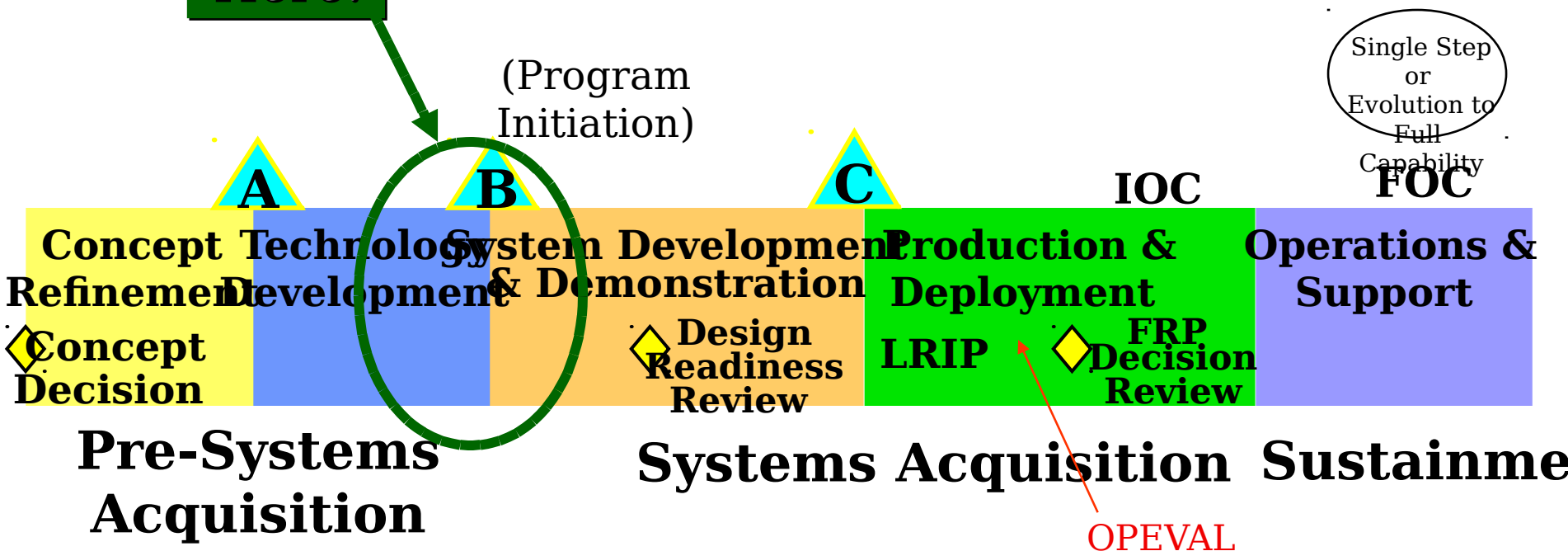
- **NSPS is the broad legislative vehicle**
- **Best Practices are the specific policies and procedures for staffing, pay, and performance management**
  
- **NSPS/BP System Tenets**
  - **Pay for Performance**
  - **Pay Banding of GS-Levels**
  - **Flexible Hiring Authorities**



U.S. AIR FORCE

# Defense Acquisition Management Approach

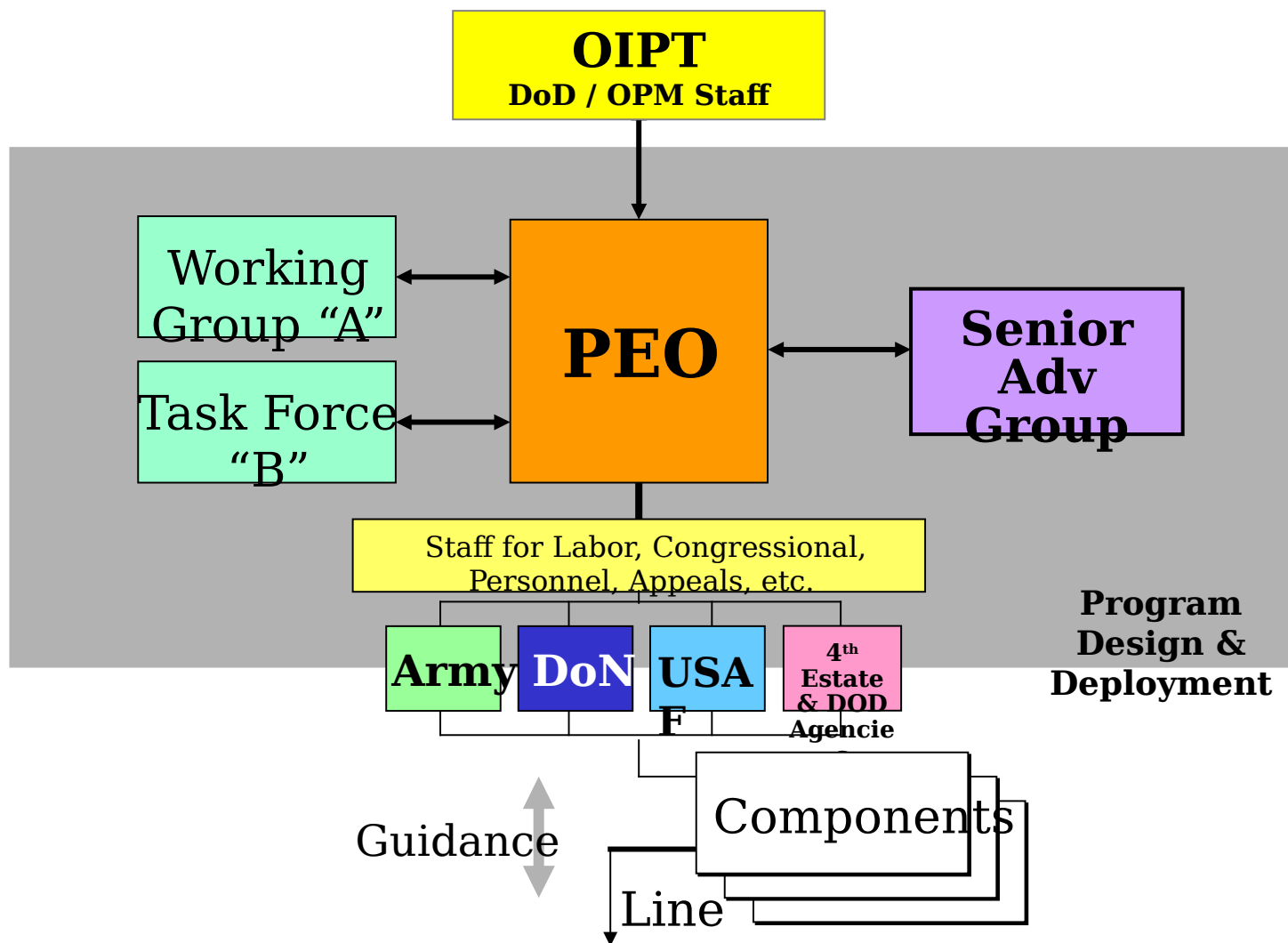
We are Here.





U.S. AIR FORCE

# PEO-Centered Organization







# ***Pay for Performance***

**U.S. AIR FORCE**

---

- **Rating cycle - 1 Jan - 31 Dec**
  - **March payout**
- **Seven standard DoD performance factors**
  - **Technical competence/problem solving**
  - **Cooperation/teamwork**
  - **Communication**
  - **Customer care**
  - **Resource management**
  - **Leadership/supervision**
  - **Contribution to mission accomplishment**



# ***NSPS/BP Classification and Pay:***

**U.S. AIR FORCE**

## ***Nonsupervisory Pay Banding***

<b>Career Group (CG)</b>	<b>Career Group Name</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<b>CG 1</b>	<b>Professional and Administrative Management</b>	<b>GS 5-12</b>	<b>GS 13-14</b>	<b>GS-15</b>	<b>Above GS-15</b>
<b>CG 2</b>	<b>Engineering support Scientific support Medical Support</b>	<b>GS 1-4</b>	<b>GS 5-7</b>	<b>GS 8-11</b>	<b>(GS-12 and above to CG 1)</b>
<b>CG 3</b>	<b>Business and Administrative Support</b>	<b>GS 1-4</b>	<b>GS 5-7</b>	<b>GS 8-10</b>	<b>(GS 11 and above to CG 1)</b>

**NSPS Web Site:**

**<http://www.cpms.osd.mil/nsps/>**

***Integrity - Service - Excellence***



U.S. AIR FORCE

# ***Things NSPS Can Change***

---

- **Staffing (hiring, assignment, advancement, removal, reduction in force)**
- **Job classification, pay (including certain premium pay), and performance management (includes General Accounting Office recommended criteria)**
- **Labor management relations**
- **Discipline, adverse actions, and appeals**



U.S. AIR FORCE

# ***Things NSPS Can't Change***

---

- **Merit system principles (including veterans' preference provisions)**
- **Rules against prohibited personnel practices (political favoritism, nepotism)**
- **Anti-discrimination laws**
- **Leave and attendance; travel and subsistence**
- **Pay for political executives, firefighters**
- **Training**
- **Health insurance and retirement benefits**
- **Safety and drug abuse programs**



**U.S. AIR FORCE**

---

# ***Back-up***



# ***Pay for Performance***

**U.S. AIR FORCE**

---

- **Factors “designed” for position – can be weighted, only specific ones used, etc.**
  - **Must equal 100**
- **Benchmark Performance Standards**
  - **Guide for evaluation and scoring**
- **Score converted into “Shares” (payout)**
  - **Basic pay increase and/or**
  - **Performance incentive**



**U.S. AIR FORCE**

# ***NSPS/BP Staffing***

## **External Hiring**

- **Initial career appointment - 3 yr probation**
- **Preserve veterans' preference**
- **Delegated Examining Unit (DEU)**
  - **Refer all candidates (eliminates “rule of three”)**
  - **Categorical ranking**
- **Scholastic Achievement Appointment**
  - **3.0 overall - 3.5 in field of study**
  - **May be used for any type of position**
- **On-the-spot**
  - **Severe shortage, unique quals, high turnover, special salary rate, exceptional need**

# ***Headquarters U.S. Air Force***

***Integrity - Service - Excellence***

## ***S&E Contact Information***



**U.S. AIR FORCE**

Washington DC  
1560 Wilson Blvd, Rosslyn VA







# Contact Information

## U.S. AIR FORCE

<u>Name</u>	<u>E-Mail</u>	<u>Phone</u>
<b>Col Craig Kimberlin</b> S&E Career Field Manager	<b>craig.kimberlin@pentagon.af.mil</b>	<b>703-588-7840 DSN: 425</b>
<b>Maj Mark Tedrow</b> Team Chief, S&E Career Field Management	<b>Mark.tedrow@pentagon.af.mil</b>	<b>703-588-7857 DSN: 425</b>
<b>Maj Ron Grogis</b> Career Development Guide, Career Opportunities Guide, S&E Awards	<b>ronald.grogis@pentagon.af.mil</b>	<b>703-696-0105 DSN: 426</b>
<b>Mr James Smith</b> Civilian Workforce Initiatives Strategic Civilian S&E Recruiting	<b>jamese.smith@pentagon.af.mil</b>	<b>703-588-7843 DSN: 425</b>
<b>Ms Helen Bohn</b> S&E Advisory Council Coordination Advanced Academic Degrees, S&E Newsletter	<b>helen.bohn@pentagon.af.mil</b>	<b>703-588-7837 DSN: 425</b>
<b>Ms Barbara Hunter</b> Military Force Development Military Workforce Initiatives	<b>barbara.hunter@pentagon.af.mil</b>	<b>703-588-7801 DSN: 425</b>
<b>Maj John Schroeder</b> Analysis	<b>john.schroeder@pentagon.af.mil</b>	<b>703-606-0229 DSN: 426</b>
<b>Ms Nora Galyon</b> Civilian S&E Development	<b>Nora.galyon@pentagon.af.mil</b>	<b>703-588-7844 DSN 425</b>
<b>S&amp;E Career Field Management Team</b>	<b>SAF.S&amp;E@pentagon.af.mil</b>	
<b>S&amp;E Career Field Management Website</b>	<b><a href="http://www.safaq.hq.af.mil/aqre/se">http://www.safaq.hq.af.mil/aqre/se</a></b>	



**U.S. AIR FORCE**

---

***Backup***

# **Backup**



# ***Military S&E Career Fields***

**U.S. AIR FORCE**

---

- **There are 34 Air Force Specialty Codes (AFSCs)**
- **The AFSCs below represent the military S&Es**
  - **AFSCs in red have the highest number of people**

- **61SxA - Analytical**
- 61SxB - Behavioral
- 61SxC - Chemist
- **61SxD - Physicist**
- 61SxE -  
Mathematician
- **61S4 - Staff Scientist**

- **62ExA - Aeronautical**
- 62ExB - Astronautical
- 62ExC - Computer
- **62ExE - Electrical**
- 62ExF - Flight Test
- 62ExG - Project
- 62ExH - Mechanical
- **63E4 - Staff Engineer**



# Civilian S&E Career Fields

U.S. AIR FORCE

- The Occupational Series below represent the civilian S&E career fields
- Occupational Series in red have the highest number of positions

## Scientist

- |   |                                      |
|---|--------------------------------------|
| ■ 0180 - Psychology                     | ■ 1306 - Health Physics              |
| ■ 0190 - General Anthropology           | ■ <b>1310 - Physics</b>              |
| ■ 0401 - General Biological Science     | ■ 1313 - Geophysics                  |
| ■ 0403 - Microbiology                   | ■ 1315 - Hydrology                   |
| ■ 0405 - Pharmacology                   | ■ 1320 - Chemistry                   |
| ■ 0408 - Ecology                        | ■ 1321 - Metallurgy                  |
| ■ 0413 - Physiology                     | ■ 1330 - Astronomy and Space Science |
| ■ 0414 - Entomology                     | ■ 1340 - Meteorology                 |
| ■ 0415 - Toxicology                     | ■ 1350 - Geology                     |
| ■ 0440 - Genetics                       | ■ 1370 - Cartography                 |
| ■ 0470 - Soil Science                   | ■ 1372 - Geodesy                     |
| ■ 0601 - General Health Science         | ■ 1386 - Photographic Technology     |
| ■ 0602 - Medical Officer                | ■ 1510 - Actuary                     |
| ■ 0660 - Pharmacist                     | ■ <b>1515 - Operations Research</b>  |
| ■ 0662 - Optometrist                    | ■ 1520 - Mathematics                 |
| ■ 0665 - Speech Pathology and Audiology | ■ 1529 - Mathematical Statistician   |
| ■ 0701 - Veterinary Medical Science     | ■ 1530 - Statistician                |
| ■ 1301 - General Physical Science       | ■ 1540 - Cryptography                |
|   | ■ 1550 - Computer Science            |

## Engineer

- **801 - General Engineering**
- 804 - Fire Prevention Engineering
- 806 - Materials Engineering
- 819 - Environmental Engineering
- 830 - Mechanical Engineering
- 840 - Nuclear Engineering
- 850 - Electrical Engineering
- 854 - Computer Engineering
- **855 - Electronics Engineering**
- 858 - Biomedical Engineering
- **861 - Aerospace Engineering**
- 881 - Petroleum Engineering
- 892 - Ceramic Engineering
- 893 - Chemical Engineering
- 896 - Industrial Engineering



**U.S. AIR FORCE**

# ***Introduction: History***

- **1999 - 2000, focus groups conducted by 311<sup>th</sup> HSW (Dr. Godfrey)**
  - **300 military and civilian S&Es interviewed at 6 locations**
  - **Results: S&Es felt unappreciated, underpaid, and underutilized**
- **Other symptoms indicating problems within the S&E workforce**
  - **S&Es were the 2 lowest manned non-rated line AFSCs in the AF**
  - **25% civilian workforce eligible to retire in 5 years**
  - **The Space Launch Broad area review (BAR) attributed 76% of failures and major anomalies to engineering deficiencies**
  - **Increase in the number of Class A Mishaps attributable to a lack of engineering applications**
    - **B-1 loss caused by a single point failure unintentionally designed into a modification to the Fire warning and extinguishing panel - caused all four engines to shut down**



U.S. AIR FORCE

# ***Introduction: History***

- These problems encouraged AFMC/CC, Gen Lyles to engage SecAF, thus bringing the SecAF and CSAF into the process
  - In Aug 2000, the AFMC/CC took a briefing titled *A Way Ahead for the S&E Workforce--A View From AFMC* to SecAF on how to respond to the S&E challenges. With that, the SecAF issued the tasking below

“Have a Science and Engineering Career field Summit . . . **Purpose is two fold, first to show that leadership is engaged on how to create and maintain an S&E Career Field**—this is needed to stop attrition—and **second, to try to understand the obstacles we face to recruiting, training, and retaining S&E officers (and civilians) and refine some (short term and) long term solutions.**”

F. Whitten Peters, SecAF  
24 Aug 00

- This tasking led to Summit I, 11 Dec 2000



**U.S. AIR FORCE**

# ***Introduction: S&E Activities since 1999***

---

- **S&E Summit I was held in December 2000**
  - **Action to develop an S&E CONOPS and conduct an S&E workforce requirements review**
  - **Identify workforce shaping initiatives**
- **S&E Summit II was held on 6 December 2001**
  - **Career guidance and mentoring**
  - **S&E To-Be requirement (Future Study)**
  - **S&E manpower authorizations validated**
  - **Established first S&E Career Field structure**
    - **SAF/AQ - S&E Functional Authority (per SecAF/CSAF)**
    - **SAF/AQR - Functional Management**
    - **SAF/AQRE - S&E Career Field Management**
    - **This team is responsible for Policy, Guidance, and Advocacy in areas dealing with:**
      - **Workforce Shaping, Career Development, Assignments, Accession Targets, Recruiting, Education and Training, Mentoring, and Retention**